

# SOCIOMETRY

*A Journal of Inter-Personal Relations*

A QUARTERLY

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VOLUME II

JULY, 1939

No. 3

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Sociometry: A Journal of Inter-Personal Relations will be presented as a quarterly publication with January, April, July, and October the scheduled dates of issue. The subscription rate is four dollars and fifty cents a year. (Make checks payable to "Sociometry.") Single numbers may be purchased for one dollar and a quarter. Subscriptions, business, and editorial correspondence, including manuscripts and books for review, should be addressed to the Managing Editor; Sociometry: A Journal of Inter-Personal Relations; entered as second class matter at the Post Office of Beacon, New York.

PRINTED IN U.S.A.

Lithoprinted by Edwards Brothers, Inc., Lithoprinters and Publishers  
Ann Arbor, Michigan, 1939

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## THE GUIDANCE STUDY

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A statement of objectives, basic points of view, special hypotheses, data sought, and procedures followed or to be followed in the future, and sample findings.<sup>1</sup>

### I. OBJECTIVES

A major objective of the Child Guidance Study has been to portray the course of development of numerous specific aspects of personality, and to investigate relationships between behavior patterns and other variables. The behavior patterns which have been studied include both adaptive and maladaptive characteristics. The other variables include, or are based upon, measures of physical status; physical growth patterns; the child's intelligence and rate of intellectual development; socio-economic measures and other aspects of the child's physical environment; data pertaining to the personality characteristics of parents and siblings and of inter-personal relationships in the home; and data pertaining to the school and social environment.

A second objective has been to study in a normal group of children the frequency, persistence, severity, and dynamics of specific maladjustive behavior, by age and by sex, and to discover the relationships of earlier

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1. This description of the Guidance Study was privately distributed, under date of December 1, 1936, to a small group of specialists in the field. The importance of this approach appeared to us so great, and its value for personality study and social relations so evident, that we took the initiative in asking for this paper for Sociometry.— Ed.

and later manifestations of problems. These facts are of direct interest and will further serve as a check upon the generalizations made from the studies of pathological samples which have dominated the literature on personality.

A third, and perhaps the most important, aspect of the study is to add to our knowledge of the critical differentials whereby some individuals give up or modify early infantile patterns and develop mature, sturdy and effective personalities, while others rigidly and neurotically cling to immature and ineffectual patterns or disintegratingly revert to them.

A fourth aim has been to compare the persistence of specific maladjustive behavior (stammering, fears, etc.) in a group subjected to guidance procedures and in a group equated but unguided.

Lastly, a more articulate and refined methodology has been sought in the field of personality investigation.

## II. BASIC POINTS OF VIEW AND SPECIAL QUESTIONS TO BE ANSWERED

In a pioneering stage of a discipline where a small body of ordered facts exist, it is difficult to have neat and clean-cut hypotheses susceptible of final proof, disproof, or explicit modification. When this pioneering stage is in a field as complex and multifactor as personality dynamics, concise (and thereby limited) hypotheses failing to take account of large areas of interactive factors often involve relationships so far out of dynamic context that little of permanent value accrues. The other extreme of practice, quantitative fact-finding procedures predicated upon no discoverable criteria of fact-sampling, remain essentially unintegrated even after elaborate statistical attempts to induce integration.

The working philosophy of the Guidance Study has led to an attempt to utilize wide arrays of facts with concise formulations of questions to be answered. Clinical experience, concerned with the dynamic interactions of individuals, has pointed the conviction that the

explanation of personality development, personality success or failure, will come from a rather broad sampling of facts, articulated in a fashion that their interactions may be observed, weighted and evaluated. Clinical experience before the study began and after the study was undertaken has brought the conviction that certain areas of interaction are more important than others and are therefore areas to be sampled extensively and intensively. The evidence from the first ten years of this study points to the fact that certain configurations of biological and environmental factors tend to produce a fairly smoothly functioning personality; other configurations, a disturbed or disordered one. The combination of experience, ten years of empirical findings, careful analyses of findings, and even wishful thinking has left so many questions still unanswered, however, that the clinic cannot as yet subscribe to a closed theoretical system. We have been organized around a simple and obvious structure which eclectically admits of any methodological attack that offers promise of yielding information in what appear as pertinent areas of interaction. It will be apparent in section III what areas are regarded as important, and within the limits of our techniques and our budget.

We shall present first our general notions on personality dynamics and second, certain specific hypotheses which have emerged.

The basic mechanism of biologic life is adjustive activity. The organism in disequilibrium (i.e., when stimulated) is characterized by immediate activity which continues until equilibrium is restored. The need for adjustment depends upon disequilibrium; the manner of adjustment depends upon the structure and past habits of the organism, the nature of the stimulation from which it seeks relief and the restrictions imposed by the environment. Personality is regarded as the flux of these adjustive activities in a given but constantly modified psycho-biological organism.

These adjustive attempts of the organism may be via simple chain reflex routes, by learned and patterned routes, or when due to sudden intense or prolonged stimulation, by diffuse activity or when blocked, by indirect compulsive routes. These adjustive attempts may be

internalized or externalized, episodic or recurrent. If recurrent and overt enough to be observed, they are given names such as tempers or shyness. If recurrent and pervasive enough that "trends" or attitudes are inferred, the term personality pattern or trait is applied. These adjustive attempts may be damaging or beneficial to the well-being of the organism, acceptable or unacceptable to the social environment. But regardless of how stabilized the patterns or how diffuse the activities, they represent adjustive devices to seek equilibrium, to satisfy needs, to side-step or placate pressures. No matter how mediated, described, or evaluated, this flux is a series of resultants of what the individual has had to adjust with and what he has had to adjust to.

With this simple and basic concept in mind, let us next turn our attention to a more explicit inspection of these interacting aspects--the organism, the pressures put upon it, and the adaptive processes involved.

The organism. A comparative study of human beings, or of any species, shows communality of structure which makes for communality of needs, response patterns, and susceptibility to stimulation. Superimposed upon this communality is a large array of individual differences which make for differing susceptibilities to stimulation, differing needs and differing response patterns. Whether these differences are in large part a function of heredity and maturational processes, or in large part a function of modification of basic structure by health, special experiences or differing environmental pressures and assaults, they exist and must be inspected along with common structure in terms of their meaning to the adjustive process. If differences are stressed in what follows, it is because (1) a study of differences includes a study of communalities, and because (2) differences are more apt to incur differential responses from the social environment and therefore have an added meaning in the adjustive process.

Differences exist in morphology, size and rates of growth, muscular equipment, nervous reactivity, sensory acuity, energy level, achievements, tensional states (directly organic and produced by conflicting reaction patterns), etc. Not only are there specific differences, but differences in configurations of equipment

occur which have differing influences both upon susceptibility to stimulation and upon response patternings. The child who is at either end of the distribution curve has not only different organic stresses to contend with than the child in the middle of the distribution--a fact which may influence behavior appreciably--but he may also develop totally different attitudes and reaction patterns toward himself through continuous comparisons with the group. And, additionally, because certain behavior is precluded or fostered for him by these facts of equipment, he may receive differential treatment by the social environment and an even larger discrepancy in behavior may appear than these structural differences (in and of themselves) would produce.

Take, for example, the undersized boy who may be small via the genes, or as a result of a pituitary disorder. If he has a father who played guard on his college football team and had high hopes for a son who would carry on tradition, the boy's size has a markedly different adjustive aspect than if his father were an arm-chair intellectual who wanted his son to become a college professor. If his sibs are much larger than he and have athletic interests, he has a very different adjustive picture than if he has small non-athletically interested sibs. Similarly with respect to the equipment and values of playmates, his adjustment needs show wide variations. His size, then, takes on meaning in terms of (1) the other aspects of his structural equipment; (2) in terms of the size of people with whom he is closely associated; (3) in terms of family and social expectancies and values connected with size or achievement dependent on size, values which tend to influence him or become his own; (4) in terms of the adequacy of other family and social supports; and (5) in terms of the success of direct or compensatory achievements which do not depend on size. In addition to this, his size changes at varying rates--very fast in the early post-natal months, more steadily from around three to eleven or twelve, then fast again during the so-called adolescent spurt. His vulnerability may vary in a fast-growing or slow-growing period because of physiological changes, or new adjustments to learn with and to his changing equipment, or because of new attitudes and pressures from outside to which he must adjust.

And so similarly for other aspects of equipment, varied meanings to the individual depend upon the dynamic context. Especially important are these meanings where variability in structure precipitates behavior which conflicts with mores. Take, for example, variability in sexual maturity. The child of marked precocity, marked retardation, or atypical development not only has variant behavior precipitated directly, but he may be subjected to marked disapproval which results in hostility, defiance or guilt feelings with subsequent compulsive releases, internalized tensions, or a variety of defence patterns.

It is obvious in the light of our basic concept of psychobiological adjustment that we need to inspect structure in context--similar structures in similar and dissimilar contexts, dissimilar structures in similar and dissimilar contexts, if we are to evaluate certain contributions of structure or structure configurations to personality.

#### The Pressures Upon the Organism

Just as there are communalities and differences in structure, so too we find communalities and differences in pressures--internal and external--which impinge upon the organism and precipitate the need for and contribute to the manner of adjustive activities. To have meaning these stimulus pressures must be looked at in the context of the organism's vulnerability or threshold of response at different levels of development, with differing past experiences and different response habits. One cannot catalogue all the pressures that call for adjustment, but certain important pressure areas will be mentioned.

Family pressures involve adjustment to different family members with their common and unique personality characteristics, the behavior, security, or tensions growing out of their inter-personal adjustments, their variant behavior under varying conditions and moods, their compatible or non-compatible values, expectations, and training techniques. These pressures offer a continuous, complex, and varying stimulus flux to the child



in the early period of intimate dependency. He not only has to adjust to them individually but in various combinations which may alter the direction of pressure. For example spinach in front of a child with just his mother present means he merely has to toy at it, spinach plus mother plus father means he has to eat it all promptly, spinach plus father alone means he has to try it at least, spinach plus mother plus father plus brother who is making noises at the table means he may not have to eat any of it. Further, his family members not only stimulate him to activity, but additionally they bring further pressures to bear on the form of the response activity which they will tolerate. One further confusion is that the same person may be a stimulus to antagonistic or ambivalent response patterns. The very nature of training sets up restrictions and demands which thwart by deferring satisfaction and make for at least low grade anger or resistance. In the usual family set-up the inducer of anger or resistance responses is also the person who by affectionate contact and by satisfying needs brings relaxing friendly responses. This basic situational stimulation to conflict of responses, without suitable channeling of patterns to release the conflicting responses appears an important factor in later ambivalences in intimate contacts. For a child who has successful response patterns established, the stimulus situation may suddenly shift by the birth of a younger sibling, the death or separation of parents, the arrival of a grandparent to live in the home, etc.

When school begins and the child spends more hours away from home, family pressure may be less potent, except where conflicts between family mores and school mores occur. During adolescence, it is conceivable that even with a wider social pressure at work, family pressure may become even more acute for several reasons. With the advent of the child's sexual maturity, the parent is susceptible to easy flare-ups of his own adolescent insecurities and anxieties, resulting in more tensions in his relationship to his child. With the adolescent's awakening interest in the opposite sex, the parent undergoes deprivation of certain libidinal satisfactions which have given him support, security and a function, and because of this deprivation, he may behave differently

to his child and create for him new adjustive problems. Additionally, the unsteady or ambivalent drive by the adolescent upon his parents for both freedom and security may provoke ambivalent behavior in the parent. The further parental anxiety over the limited time left for "moulding" the child for professional or social accomplishment may make for more intense and persistent pressure during this period. The effect on the adolescent of living out or failing to live out parental expectations may or may not be suitable to the adolescent's needs and if unsuitable, may easily result in hostility, erratic behavior, or defeatist patterns. All of this intensification of pressure may be occurring at a vulnerable period--not only physiologically, but socially and because in his new need for intimacy the adolescent may be baffled and chagrined by the reactivation of old patterns associated with intimacy during his very early dependent years.

#### Social Pressures

Similarly social pressures and pressures from the school, etc., might be detailed in terms of their meaning to the child. For the adolescent, pressure from what the Freudians call the super-ego (values of the family and the culture, which have been taken over and internalized as attitudes) comes into more prominent play and calls for adjustive behavior which may be in conflict with parental expectations or biological needs.

That out of this heterogeneity of stimulations fairly stable or characteristic personality patterns emerge, appears to us due much more to certain stable and fairly constant pressures than to chance episodes. And, therefore, a detailed account of pressures becomes an important aspect for the understanding of personality dynamics. However, highly traumatic episodes at certain critical periods may alter the organism's vulnerability, disrupt successful patterns, or make them ineffective in changed conditions.



The Adaptive Processes Involved

A brief statement follows on the nature and mechanisms of the adaptive processes. We see simple and direct adjustive activity where the behavior removes the stimulus--e.g., hair falling over the eyes is pushed back. If such activity occurs repeatedly enough, it may develop into tic-like patterns which persist even after the original stimulus is removed. We see direct adjustive behavior where the organism removes itself from the stimulus situation. This may involve physical or psychological withdrawal as in the case of a child who "fails to hear" the constant nagging or moralizing of a parent. Or the simple direct response--e.g., eating when hungry, changes the reactivity of the organism and restores equilibrium.

Diffuse or massive adjustive behavior (e.g., where there is heavy emotional involvement) occurs in response to (1) sudden or violent or cumulative stimulation, to (2) thwarting of organic drives, conflict of drives, or thwarting of old response patterns, and to (3) failure of old response patterns to bring solutions and thereby restore equilibrium.

Indirect or substitute response patterns are evolved when direct ones fail. Of this order are distractive activities, which shut out the conflict--e.g., busy work, misbehavior, reading detective stories, physical activities, etc. These may be so recurrent as to become highly stabilized patterns, useful or unproductive in themselves, yet essentially they are adjustive attempts. Solutions may be sought via complicated withdrawal patterns--timidity, negativism, phantasy, fears, somatic preoccupations, the building up of inhibitory super-ego values, and in extreme cases in schizophrenic withdrawal. Solutions may be channeled into projected rationalizations, such as gossiping, blaming parents, circumstances, heredity, the government, fate, and in extreme forms in systematized paranoid reactions. Compensatory activities may be set up--e.g., mental superiority for physical inadequacy, bullying behavior to compensate for cowardly feelings, martyred service for hostility, etc. Many of the compensatory patterns bring the support of achievement, many

bring disapproval which adds to tension. It becomes important for the understanding of personality to know the laws of learning that mediate both successful and unsuccessful channeling of response patterns and personality trends. The major emphasis must be, however, in terms of what adjustive needs an individual's behavior is attempting to satisfy.

### Special Hypotheses

Implicit in every correlation and in every clinical comparison is an hypothesis or a question. Out of the myriad possibilities of relationships we have sought to inspect those about which we had some clinical guesses and needed further evidence. Many hypotheses (relative to general trends) we have had to discard or alter, although clinically they appear to be operative in particular persons. Many of our guesses have had to be modified or restricted or new attacks made which would yield more explicit information. In that which follows only samples here and there can be offered from the array of specific hypotheses we have checked among the data of these earlier years, or hope to check in the future.

#### Some specific hypotheses which we hope to check:

Comparison of configurations of biological and environmental factors will furnish more significant evidence for differentials in personality dynamics or structure than those obtained from comparisons of single variables.

But certain patterns of behavior, externalized and internalized, are more heavily weighted by physiological factors than situational ones, others are largely habits growing out of the pressures from external factors.

#### Examples leaning toward physiological weighting:

Low energy level and mucous membrane irritability (e.g., gastrointestinal irritability and dysfunction) at the early periods are heavily weighted factors in internalized and withdrawn trends of response. We have evidence in individual cases of highly ruminative and

hypochondriacal trends in this combination of physical findings, which we intend to compare in these respects with the evidence from highly externalized cases. And conversely, high energy level and peripheral irritability--e.g., in skin allergies--are important factors in externalized patterning. Periods of rapid growth or rapidly altering structure are periods of greater vulnerability--the focus of vulnerability being different for the early preschool period and the later adolescent period.

Examples leaning toward situational weighting:

Certain response patterns associated with intimate personal contacts built up in the early periods of physical dependence--affectional, hostile, tearful, etc.--are critical ones for successful or unsuccessful psycho-sexual adjustments at maturity. Intense, unconscious, and unsolved ambivalent drives in parent-child relationships and the results from straining marital adjustments are associated with anxiety trends and compulsive or explosive behavior in children.

Being an older child in a pair is conducive to different patterning than being a younger child. For example we have evidence for the period before ten that other factors being similar the older of a pair of boys, if ages are within 2 or 3 years, is much more apt to be insecure in social relationships, the younger insecure about his intellectual ability.

The presence of stimuli which set off antagonistic response tendencies is an important factor in anxiety and guilt feelings, and in the building up of rigid super-ego values to stabilize the socially approved response (as for example the anger vs. affection responses to the same person or the responses from biological drives vs. the responses from social pressures).

### III. PROGRAM OF DATA COLLECTION

The sample--252 children and their respective families--was arbitrarily selected upon the basis of every third birth (January 1928 to July 1, 1929) in Berkeley, California. Two groups (126 in each), a

guided and an unguided control-group equated on the basis of socio-economic findings, have been followed for ten years. Active cases now included are 115 families in the guidance group, 103 cases in the control group.

Nature of this study: Essentially clinical in nature, this undertaking differs from other clinical studies in two major respects. It has attempted cumulative observation of contemporaneously developing adjustments and maladjustments in a normal sample. The usual clinical procedure has been to attempt to unravel the antecedents of already developed maladjusted behavior, in a so-called "problem group."

Several panels of investigation were undertaken:

1. Pre- and circumnatal data (for both groups).  
Not cumulative.
2. Systematic cumulative records of health, regime, and physical growth--physical examinations, anthropometric measurements, developmental x-rays, and photographs (for both groups). This is to be continued and supplemented with more intensive medical and laboratory examinations on certain extreme or atypical cases.
3. Systematic records of mental development (for both groups); to be continued in modified dosage.
4. Systematic records (for the guidance group) of the development of behavior attitudes and personality patterning as seen through the eyes of parents, siblings, teachers, classmates, the child himself, and the clinic staff. In the early years the parents were the major informants; later when the child became more articulate, much more came from him. Still later, teacher and classmate opinions were available. Interview material and indirect methods both have been used.

Systematic but superficial inventories of behavior and personality patterns (for the control group) from parents. Teacher and classmate material similar for both groups.

The program to be continued with modification in certain techniques, somewhat reduced schedules of interview with children, more observations in school and recreational situations, further

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elaborations of indirect techniques--psychoanalytical, drawings, picture associations, etc. From all children will be secured systematically certain material via psychoanalytical techniques. Additionally it is planned to select a small number of children of differing personality types, for more intensive psychoanalytical procedures.

5. Systematic records of physical and psychological environment, including the home and its personalities, the teacher, classmates, playmates, and neighborhood facilities and pressures (guidance group, and on school aspects both groups). To be continued and at some time during this period one set of intensive interviews on family situations and interpersonal relationships to be secured on the control group. A further small extension of program, not as yet clearly formulated: small group discussions with our parents to get at, by a different technique than personal interview, what seem to be frequent bafflements of the parents of adolescents.

#### IV. PROGRAM OF DATA ANALYSIS

The data analysis in this cumulative study of personality development presents three major fronts of complexity. The first is due to the varieties of techniques used in obtaining the data in the several panels of investigation. The second source of complexity is occasioned by the extensiveness of items tapped in each panel. The third grows out of the fact that the data are obtained over a long time span.

Our philosophy of data organization and presentation has been to combine if we could the assets of the two conventional methods--case history and statistical analysis. We have attempted to keep as close to our clinical facts as possible (which seems to be the major merit of the case history presentation) and at the same time to use statistical devices which so organize findings that some degree of generalization is possible. We have not expected to establish statistically high one-to-one relationships in this multifactor field of

personality. But we do hope to be able to state statistically that some constitutional and health factors show higher relationships to certain behavior problems than do certain environmental pressures--and that the opposite is true for certain other behavior patterns (we already have considerable evidence on this for the early levels). And we do hope to discover certain patterns of concomitancy of which some may vary with age and maturity, some with home and social pressure and some may continue irrespective of these, and therefore appear essentially constitutional.

We have been forced to experiment with statistical techniques to find those most suitable to the effective analysis of our clinical material. This has involved direct utilization and modification of established techniques and the seeking of new techniques, especially needed in those areas where simple statement will not suffice to express the complicated patterns and through-time relationships which are found.

#### Analysis Within the Several Panels

Certain steps have been systematically attempted in each of the panels of investigation:

1. The quantifying of clinical material (interview, observation, and test material). For interview and observational material, this involved the development of a more precise vocabulary, and of codes based on descriptive continua of specified behavior or conditions--continua on which degrees of intensity or kind could be demarcated.
2. An assessment of the reliability of material to be used statistically. The techniques used for these assessments have, of course, varied with the type of data and the methods employed in obtaining them. When measurement was employed (e.g., anthropometrics and mental tests) conventional reliability determinations could be made. In interview material, several approaches were necessary: e.g., the consistency of reports from the same informants; the agreement among



informants (teacher with child, classmate with teacher, parent with child, etc.); agreement among clinic staff members (tester with tester, interviewer with interviewer). Only where the reliability warranted it, was the material used statistically to determine relationships.

3. Group findings

- a. Distributions and interrelationships at each age level.
- b. Interrelationships over time--a measure of prediction.
- c. Trends of the group through time for the various items considered.
- d. Changing interrelationships through time.

4. Individual findings

- a. The individual's trends in comparison with group trends.
- b. The individual's trend with respect to himself (e.g., percentage increments in physical growth, comparison of later to previous behavior or personality patterns).

Analysis of Relationships Between Data Obtained  
From Different Panels

We are making exploratory attempts to find fruitful methods of showing and stating relationships between panels. This is being done in terms of:

(a) cross-section interrelationships between single measures and between composites; and (b) in some analyses we have attempted to show trends in relationship through time.

We are just beginning to attempt a study of multipanel relationships by getting "clusters" or "profiles" of relationships. Exploratory findings to date suggest this as a very fruitful method of analysis and presentation. We shall study clusters including (a) behavior manifestations, (b) biological findings, and (c) environmental pressures, to throw light on the varying weightings of constitutional versus environmental factors at different ages with respect to adjustive patterns.

Our statistical programs in the future will follow along the same lines if they continue to appear fruitful. Our case history analyses will be further emphasized by a comparison of summaries prepared by a psychoanalytically trained worker with those of an eclectic non-psychoanalyst.

It is hoped that by these varieties of approach to data analysis--statistical, psycho-analytical, and biographical--that more sharpened and more fruitful generalizations will be possible than by the use of any one method alone.

## V. SAMPLE FINDINGS

### A. Frequency and persistency of problem behavior during the preschool years<sup>2</sup>

We have found that no normal child is completely free of adjustive devices that get labeled as "problem behavior"--the average number varying during the preschool years from four to six per child.

Frequency was found to vary with age for most problems. Soiling, diurnal and nocturnal enuresis decreased with age and were eliminated in the order named; whereas constipation showed no trends with respect to age. Masturbation and restlessness in sleep showed no trends with age for the preschool period. Thumb-sucking decreased as nail-biting increased. Tempers, fears, jealousy, oversensitiveness increased to around 4 to 4 1/2 years and then began subsiding. Since temper tantrums, fears, and overt jealousy occur at one age level in more than 50% of our children, they cannot sensibly be regarded as neurotic behavior as so commonly assumed, but rather as evidence of tension or as adjustive devices.

There is some evidence that certain patterns tend to fall into clusters.<sup>3</sup> For example, at year five quarrelsomeness, mood swings, negativism, irritability,

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2. Data analysis by H. S. Conrad.

3. The method of cluster analysis will be described in a forthcoming publication by R. C. Tryon. The cluster analysis was done by Claire Myers.



temper tantrums, jealousy, and competitiveness show similar degrees of relationship to other problems, a cluster suggesting a labile or disturbed organism. Another cluster suggestive of a child who is psychologically withdrawn and below par physically--withdrawing, introverted, submissive, shy, somber, and excessively reserved--is closely associated with underactivity.

B. Physical condition, size, rate of growth<sup>4</sup>

We found many children showing defensive patterns to exceptional size, and over-reactive patterning to continuously irritating physical conditions. For example, the youngsters with hives and eczema were more apt to show irritable or temper responses than youngsters completely free from such conditions.

Wide individual differences were found in physical condition, size, rates of growth; in particular, the oversized girl and the undersized boy seemed to have a larger adjustive problem than those who fell in the middle of the distribution.

We discovered that during the preschool years physical measurements had more prognostic value than mental measures. For example the correlation of height at 21 months with height at 60 months was .80; weight at 21 months with weight at 60 months .72; whereas mental tests at 21 months with mental tests at 60 months was only .32.

A preliminary analysis of the relationship of physiological status to specific problems shows interesting results. For the preschool period certain problems appear much more closely related to poor physiological status than do others. For example, elimination problems, eating difficulties, nail biting, overdependence, and negativism show for both the guidance and control groups, and for the different age levels, more recruits from poor physiological status. On the other hand, thumb sucking, overactivity, lying, and fears have a few more recruits from children with better than average physiological status. Tempers and jealousy get as many recruits from good as from poor physiological

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4. Data collection under direction of H. R. Stolz; data analysis by M. P. Honsik.

status, and seem much more related to psychological factors than to physiological ones.

### C. Intelligence<sup>5</sup>

Wide individual differences were found not only in intellectual status, but also in growth rates among children of similar I.Q. The prognostic significance of mental-test scores was poor for the preschool years, but increased with age (due possibly in part to the introduction of better continua of test items). The following correlations for three 3-year periods illustrate the increasing predictive significance of mental tests among older children.

#### Correlation between mental scores at

2 years and 5 years	$r = .32$
3 years and 6 years	$r = .66$
5 years and 8 years	$r = .70$

Inspection of the individual curves of mental test performance showed marked variations, some children rising with respect to the group, some falling, and some showing a steady group placement. For example, between 21 months and six years one child rose steadily from a percentile rank of 1 to 90--or an I.Q. rise of from 80 to 135; another child rose from an I.Q. 89 to an I.Q. 170. Another child dropped steadily (5 or 6 I.Q. points per test administration) from an I.Q. 112 at 21 months to an I.Q. 70 at 6 years. In this last case, intensive investigation of physical and physiological factors has yielded no explanation of the drop.

Relationships of intelligence to personality and behavior problems were much smaller than those found in the case of either physiological condition or family influences. Excessive dependence, speech difficulties (largely enunciation) and enuresis are recruited from the lower I.Q. levels, whereas the higher I.Q. levels contribute--during these same preschool levels--more nail biting, stealing, lying and attention-demanding (correlations are low, indicating only slight trends).

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5. Mental tests made largely by Lucille Allen, G. V. Sheviakov, Adele Jaffa; data analysis by M. P. Honzik.

In individual cases, of course, one sees evidence of strain among children whose intelligence-development fails to meet parental expectancy, and evidence of smugness and conceit among children whose parents display unwise attention to precocity.

#### D. Family variables<sup>6</sup>

Great variations occur in socio-economic conditions, education, family constellations and interpersonal relationships within the home; correlations between these factors and problem-incidence, however, are not high. Marital adjustment yielded more consistent and higher correlations with behavior and personality difficulties than did other family variables. Attention-demanding, temper tantrums, negativism, food finickiness, overdependence and daytime enuresis showed more recruits from families with unhappy or difficult marital adjustment. With increasing age, tempers and negativism showed increasing relationships with marital maladjustment, during this early preschool period. Thumb sucking and nocturnal enuresis, on the other hand, showed more recruits from happy and mutually supporting marital relationships. It is interesting to note that thumb sucking showed zero correlations with other problems, and was recruited from the favorable end of the scale on practically all family variables.

Parents agreement on discipline showed a fairly high correlation with marital adjustment, and much the same correlations with individual problems as obtained for marital adjustment.

Mother-child relationships. Fewer problems are reported or found among children of relaxed mothers than of mothers who are worrisome, uneasy or tense in their relationships to their children. Although the correlations were low they were consistent in direction for speech problems, negativism and tempers.

Education. Lower relationships were obtained with education than with intra-family adjustments. These relationships indicate more recruits from lower education levels in the case of tempers, jealous, food

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6. Data collected by Clinical staff; data analysis of early preschool period by Miss E. Pearl Bretnall.

finickiness and diurnal enuresis. Speech problems, on the contrary, were found more often in families of greater education.

Interesting and dramatic individual exceptions to the trends were found. Stable children, with little or no evidence of behavior or personality disturbances, were found in underprivileged and disturbed homes. Poorly adjusted children were found in homes with good marital adjustment, and superior educational and economic status.

To summarize, it was found that when a home was psychologically unfavorable in only one or two respects, the youngster could usually run his course without much disturbance, provided the parents were themselves secure enough to give the child adequate security and affection. But in homes with a large number of unfavorable aspects, the youngster was likely to give indications of being disturbed in his emotional development and habits. Affection and security between and from the parents was found to be a major need for the children.

Statistical evidence is not yet available on differentiating trends associated with sibling birth-order and sibling adjustments. We have clear evidence both clinically and statistically that insecurity of the type known as jealousy, is an important factor in other maladjustive patterns: more problems, and more severe problems occur in the jealous than the non-jealous group. Clinical opinion suggests somewhat different patterning in "only" children, the older of a pair of boys, the younger of a pair of boys, the older of a pair of girls, etc. Other things being equal, we have the clinical impression that the older of a pair of boys is less likely to have confidence and ease in intimate social relationships; the younger of a pair of boys is less likely to have confidence in his abilities. In our group "only" children tend to show, during the first five years, more overactivity, disturbing dreams, showing off, masturbation and constipation; whereas children with sibs show more jealousy, quarreling, lying, destructiveness, and soiling difficulties. These differences are small but consistent.

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7. Analysis of data by M. P. Honsik and W. M. Wickham.

### E. Reputation among classmates<sup>8</sup>

Reputation among classmates--an important area of psychosocial environment--shows marked individual difference in social approval, disapproval, and notice. Some of our children obviously had the continued support of marked social approval, some carried the load of heavy disapproval, others were almost completely ignored. The findings on individual children from this type of data give important leads for any social therapeutic program at school.

The correlations between teachers' opinion and classmates opinion in the first three grades varied widely for different items (from -.11 for "sissy" to +.92 for "not many friends") pointing to the fact that the opinions of one's classmates may vary considerably from adult opinion. In general there was more agreement on detrimental than on favorable opinions.

A comparison of the correlates of being a "Real boy" or a "Real girl" in the first three grades is of interest. The Real boy is good at games ( $r = .75$ ), popular ( $r = .66$ ), not easily scared ( $r = .66$ ), a good sport ( $r = .65$ ), but is sometimes bossy ( $r = .27$ ). The Real girl ("acts like a little lady") is not quarrelsome ( $r = .70$ ), is a good sport ( $r = .63$ ), sits quietly in class ( $r = .58$ ), and is popular ( $r = .57$ ); but she, unlike the Real boy, is not noted for being good at games ( $r = .24$ ).

### F. Clinic's effectiveness<sup>9</sup>

This material was obtained to get leads for more effective clinic techniques, and for focussing attention on what parents regarded as important areas of clinic influence. The data--obviously a composite of parental interest and the practices of this specific clinic--give useful indications of what parents are interested in, and where they feel in need of help. The data are of particular interest, because very few parents gave wholesale approval or disapproval, but were

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8. Data obtained by A. Davis and L. Smith. Analyzed by M. P. Honzik.

9. Data collected by G. V. Sheviakov and J. W. Macfarlane; analyzed by M. P. Honzik.

discriminatingly selective in their comments.

More than 50% of this unselected sample attributed to the clinic help on the following, in the order named: Marital adjustment, attitudes toward making the child more self-reliant, increased discussion between parents on child training, more detachment in the technique of child training, more effective methods of discipline and training, easier attitudes toward sex and sex instruction, play equipment, and techniques for handling specific problems.

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## SOCIAL AGENCIES IN THE PLANNED RURAL COMMUNITIES<sup>1</sup>

Charles P. Loomis  
and  
Dwight M. Davidson, Jr.

Important to any community, new or old, are its formal organizations, because, as is so frequently true, when the family cannot satisfy the social needs of individuals, certain requirements are met through cooperative effort among families and individuals. The adequacy of the social agencies that tend to develop in response to such needs determines in no small measure the level of living of the families. Moreover, in American society their failure to function effectively will mean that individuals cannot develop well-rounded personalities or live the abundant life. Whenever these agencies patronize the entire family rather than individuals the whole pattern of the community will be different from that in communities in which social agencies tend to serve individuals.<sup>2</sup> For example, the church may tend to be the most familistic agency in the community; consequently, if the influence of the church is strong, the role of the family in the general organizational structure of the community will become more important.

1. This is the third in a series of articles on planned rural communities. The preceding articles "Sociometrics and the Study of New Rural Communities" and "Measurement of the Dissolution of In-Groups in the Integration of a Rural Resettlement Project" by the same authors appeared in the January and April issues of Sociometry. These studies conducted by the Bureau of Agricultural Economics in the United States Department of Agriculture are under the supervision of Dr. Carl C. Taylor, in Charge of the Division of Farm Population and Rural Life.
2. Loomis, Charles P., "The Development of Planned Rural Communities," Rural Sociology, December 1938.



The recently formed planned rural communities, in which heterogeneous groups of people were established in a new environment, furnish actual evidence of the importance of social agencies in community life and the way in which these agencies develop in response to the needs of the people. In the early days of these communities, families found themselves in new situations, living with people with whom they were unacquainted, and separated by great distance from their old friends and organizations. New institutions to replace the old were essential. As a result of a study made in seven of the new resettlement projects indication of the importance of formal organizations and their development in the new communities may be secured.<sup>3</sup>

### The Communities Studied

The projects included in the study were located in the South and Southwest and varied in size at the time of the study from Ropesville Farms with 32 families to Dyess Colony with 484 families. (Table 1). Some of the projects were established on a subsistence farming basis while for others rather large-scale farm enterprises were planned. The people selected as settlers varied from the poorest type relief client to the large-scale farmer who had been displaced by land-purchase

3. Analysis of the economic status of the families during the first year of residence in the resettlement community and a comparison of these families with the economic well being of some prior to arrival on a settlement project has been published. See Loomis, C. P., and Davidson, Dwight, M., Jr., "Standards of Living of the Residents of Seven Rural Resettlement Communities," Social Research Report No. XI, U. S. Dept. of Agriculture, Washington, D.C., October 1938. More complete analysis of the social relationships and institutions of the inhabitants may be found in "Social Relationships and Institutions in Seven New Rural Communities by Loomis, C. P. Social Research Report No. XVIII, to be published soon. It is proposed to study the formal and informal associations patterns and economic status of the families in these communities periodically in order that changes may be traced.

Table 1

LOCATION OF COMMUNITIES STUDIED AND NUMBER OF FAMILIES  
INTERVIEWED IN EACH

Community	State	Number of families in community <sup>1</sup>	Number of families interviewed <sup>2</sup>
7 resettlement communities		1,156	912
Ashwood Plantation	South Carolina	63	63
Bosque Farms	New Mexico	42	42
Cumberland Homesteads	Tennessee	200	184
Dyess Colony	Arkansas	484	415
Penderlea Homesteads	North Carolina	110	49
Ropesville Farms	Texas	32	32
Skyline Farms	Alabama	225	127
Irrigation--reclamation			
Klamath Falls	California-Oregon	3	57
Established communities			
Tortugas	New Mexico	100	33
South Holland	Illinois	600	552 <sup>4</sup>
Neighborhood of -			
Bosque Farms	New Mexico	3	20
Cumberland Homesteads	Tennessee	3	47

1. At time of survey.
2. Does not include schedules discarded because of inadequate data concerning social participation.
3. Number of families not known.
4. Data pertaining to participation in formal organizations is based on 443 schedules.

programs. Despite these differences in the people and the communities, all families had one thing in common, they were moving into a new undeveloped location to begin a new life.

For the ostensible purpose of evaluating the situation in the planned community as it was revealed in the early days of development, similar studies were conducted in three established communities and in the area surrounding two of the projects. The three older control communities studied were a closely knit Dutch village in Illinois,<sup>4</sup> an Indian-Mexican village in New

4. For more complete description see "Social Relationships and

Mexico, and an area within a large irrigation project in California and Oregon.<sup>5</sup> Families living near Cumberland Homesteads and Bosque Farms,<sup>6</sup> but independent of the new communities in all respects, were also included in the survey.

When the original survey was made the families had been residing in the resettlement communities anywhere from one month to two and a half years. So recent was the origin that community life was yet in an undeveloped state and formal institutions had acquired no permanent aspects. With the organizations in such an embryonic state of development analysis may not be significant other than to point out the possible future trends.

#### Religious Organizations

Some of the social organizations existing at the

(footnote continued) Institutions in an Established Rural Community, South Holland, Illinois," by L. S. Dodson, Social Research Report No. XVI, U.S. Dept. of Agriculture, Washington, D.C., February 1939.

5. See "Standards of Living in an Indian-Mexican Village and on a Reclamation Project," by C. P. Loomis and O. E. Leonard, Social Research Report No. XIV, U. S. Dept. of Agriculture, Washington, D.C., August 1938.
6. These control communities were surveyed in connection with other studies and do not represent the best controls obtainable. They are all extreme in certain features. Few American communities are as closely knit by blood and religious ties as South Holland. This rural community has accomplished the remarkable feat of insulating itself from important traits characteristic of the adjacent urban centers. The Mexican-Indian village retains many diluted Indian cultural traits, but its citizens are farm laborers belonging to the Catholic Church. The Klamath Falls Irrigation Project is unique in that its settlers came from all parts of the country and all professions to take up valuable homesteads which made them some of the most prosperous commercial farmers of the nation. The holdings in this latter project were first occupied nine years previous to the field investigation. The community has no traditions which root in the past and the settlers have few common bonds except that they are dependent upon the market for their livelihood and many were world war veterans. In many respects it is an urbanized farming area.

time of the study were sponsored by the settlement officials while others were developed by the people in response to immediate needs. By far the most important institution, as would be expected in rural areas, was the church and formation of some type of worship service had demanded priority over all other types of social agencies. In the early days of the projects makeshift arrangements were employed to provide religious meetings. Any available space was used as a meeting place and services were conducted sometimes by visiting ministers and at other times by volunteers in the community. On one of the projects the first church service was conducted by a settler in one end of a mule barn. In most cases the settlement officials attempted to make some provision for religious meetings, usually in the form of union or non-denominational services.<sup>7</sup> Despite the efforts to cut across creeds and denominations to sponsor communal activities by union religious services, it soon developed that such type of worship would not meet the needs of a majority of the people. While most of the inhabitants were Protestants, each preferred to remain loyal to his particular creed. In some cases conflicts developed between the settlers who wished to remain loyal to a union church and those who preferred to retain their particular creed, demanding that services be conducted in the way to which they were accustomed. The union service was a radical change.<sup>8</sup>

Ordinarily, the building in which the union services were held had to be used for all community social activities. To hold worship services and dances in the same building violated the mores of many of the settlers. With limited means of transportation, often the relatively great distance to the meeting place had adverse influence upon the early success of the community church. Soon after settlement was under way, there was a reversion, particularly in the larger communities, to the

7. On at least one of the projects the attitude of the prospective clients toward union religious services received major emphasis in the final selection of the settlers.
8. For example, on one project there was great dissatisfaction with the union church because the minister was not of a particular creed and did not preach the "gospel" but told of trips to Washington and other places during church service.

denominational service and neighborhood meetings were inaugurated. In the absence of buildings brush arbors were constructed, abandoned sawmill sheds and barns were used, and not infrequently families held services in their homes. In some cases, these organizations were established in the emerging neighborhoods which began to be evident very soon after the projects were settled.

### Participation in Religious Services

Notwithstanding the fact that on most of the seven resettlement projects church facilities at the time of the field work were inadequate and inferior to those now available, the participation of the settlers and their families was relatively high. The children reported an average annual attendance of 49 times at all religious meetings during the early period of the resettlement project as compared with 52 times in the old community in which they had lived the year previous to settlement.<sup>10</sup> The parents, also, reported slightly higher participation in the old community attending 42 times per year as compared with 31 times in the new resettlement community. On two of the projects, Bosque Farms and Penderlea Homesteads, the parents reported greater participation in religious activities after settlement. For the children this was true at Ashwood and Bosque. (Fig. 1 and 2)

Seldom would the individual members of rural families be found to attend so many church meetings as were reported in South Holland. Here there are five Dutch Reformed Churches and few of the residents fail

9. The sociometric technique was employed in portraying the informal relationships of the families. Often the sphere of influence of the local religious services was related to the pattern of family associations.

10. In the case of Bosque Farms, Cumberland Homesteads, Dyess Colony, and Penderlea, some of the families had not been in residence on the project for one full year at the time of the field interviews. In such instances, the monthly attendance for the months previous to the interview was taken and multiplied by 12 to represent the annual attendance.

to attend the services. The average annual attendance at all religious meetings for the husbands and wives was 63 and for the children, 98. At Tortugas where all of the families are members of the village Catholic Church, the average number of meetings attended annually by the parents and children amounted to 40 and 45, respectively. The other control groups were more heterogeneous in their church affiliation and reported less participation. The families at Klamath Falls reported the lowest annual participation in church activities of all residence groups. Thus, church participation of the settler families, measured in terms of attendance, falls between that of the closely knit and religious Dutch community, South Holland, and the farm families on the Klamath Falls Irrigation Project with their highly rationalized, mechanized and commercialized enterprises.

In all areas church preaching service was the most important form of religious meeting as evinced by a greater proportion of people attending this type of service. Although a greater proportion of people reported attendance at church services prior to settlement, the attendance of those who did participate was greater in the new community than in the old. In the resettlement communities a much larger proportion of the children than of the parents reported attendance at church or preaching services.

As demonstrated by the attendance of the children, resettlement has not secularized the families. This may be significant in view of the fact that the members of the families at Klamath Falls reported greater participation in church activities during the year previous to settlement than for the year on the project included in the study, an indication that resettlement might have affected church participation adversely. But the families at Klamath Falls may have overestimated their attendance during the year previous to resettlement for, in most cases, nine years had elapsed since they had left those former communities. However, the type of culture prevalent on this irrigation project may stress participation in non-church activities of a special-interest nature more than it nurtures and supports church organizations.

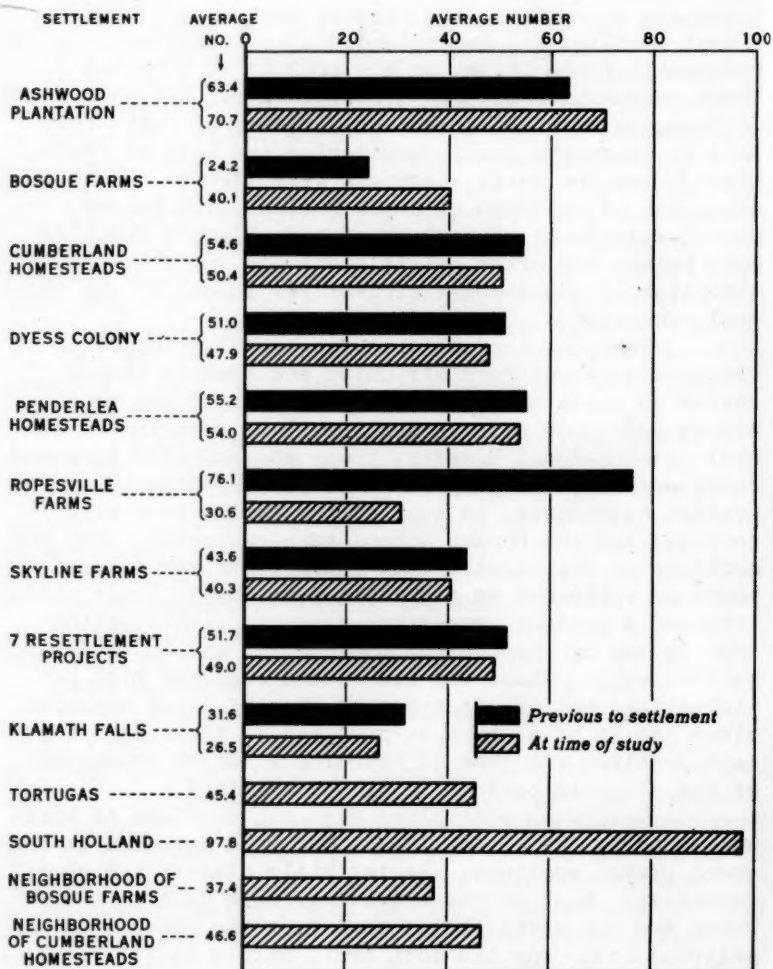
A smaller proportion of parents attended Sunday



School than attended church preaching services. Although there are exceptions, the various members of the settlers' families did not attend Sunday School meetings as frequently while living on the project as they had in their communities of previous residence. However, these differences were not great; as a matter of fact, they were surprisingly small considering the lack of facilities during the early stages of resettlement. With the exception of children at South Holland, the Sunday School attendance of members of resettlement families both before and after resettlement was somewhat greater than that of the members of families in any of the control communities.

The young people's church organizations, such as the Baptist Young People's Union and Epworth League, failed to reach a very large proportion of the people either before or after resettlement or even in the control communities. However, those who actually attended these organizations supported them, as indicated by the average attendance, as well as the church preaching services and the Sunday School were supported. For the children of the resettlement family, the young people's meetings performed an important function in their social life and a greater proportion reported participation than in any of the control communities and South Holland particularly. Those who did attend reported high participation, but it was apparent that if these organizations are to be of more service one of their most important problems was that of reaching a larger proportion of the eligible persons in the communities.

Religious activities were not confined to those sponsored by the church itself, but were extended to frequent prayer meetings, special Bible classes and choral societies. Most of these meetings were held in the homes and the participants came from the immediate neighborhood. For the most part, only a small proportion of the families in any residence group participated in such meetings, but at Penderlea Homesteads approximately one-fourth of the husbands and 30 per cent of the wives reported attending this type meeting at least once a month.



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Figure 1. Average number of meetings of religious organizations attended annually by offspring living at home, at time of study and previous to settlement, 1 reclamation and 7 resettlement projects and 4 control groups.



Participation in Non-Religious Organizations

Many studies have shown that participation of American farm families in non-church organizations is not great; it is almost a universal rule that attendance at church and religious meetings exceeds attendance at all other organizations combined. Other studies have demonstrated a high relationship between the extent to which the type of agriculture is commercialized and the prevalence of various types of farmer's marketing co-operatives.<sup>11</sup> It is probable that the more rural the culture and the less commercialization and mechanization predominates in American communities, the greater will be the relative importance of the church among the social institutions. The families on the irrigation project at Klamath Falls, the most urbanized group studied, reported far greater attendance at non-church organizations than did any of the other groups. Their most frequent non-church contacts were with the American Legion and Auxiliary organizations, but with relatively large participation in fraternal orders, Parent-Teachers' Associations, farm and cooperative associations, card, dance, and gun clubs, and even the Union of Commercial Travelers.

Parents

Parents on the seven resettlement projects reported an average of 8.3 meetings of non-religious organizations attended each year which was three meetings more per year than they had attended previous to settlement, and greater than the number reported by parents in any of the control communities except Klamath Falls. The differences in the number of non-religious meetings attended by the settlers on the individual projects,

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11. See article by Emelianoff, J. V., on "Cooperation in Agriculture," in Sorokin, P. A., Zimmerman, C. C., and Galpin, C. J., "A Systematic Source Book in Rural Sociology," Vol. II, The University of Minnesota Press, Minneapolis, 1931, pp. 169 ff. Here cooperation in the "farm" and the "peasant hemispheres" is compared.

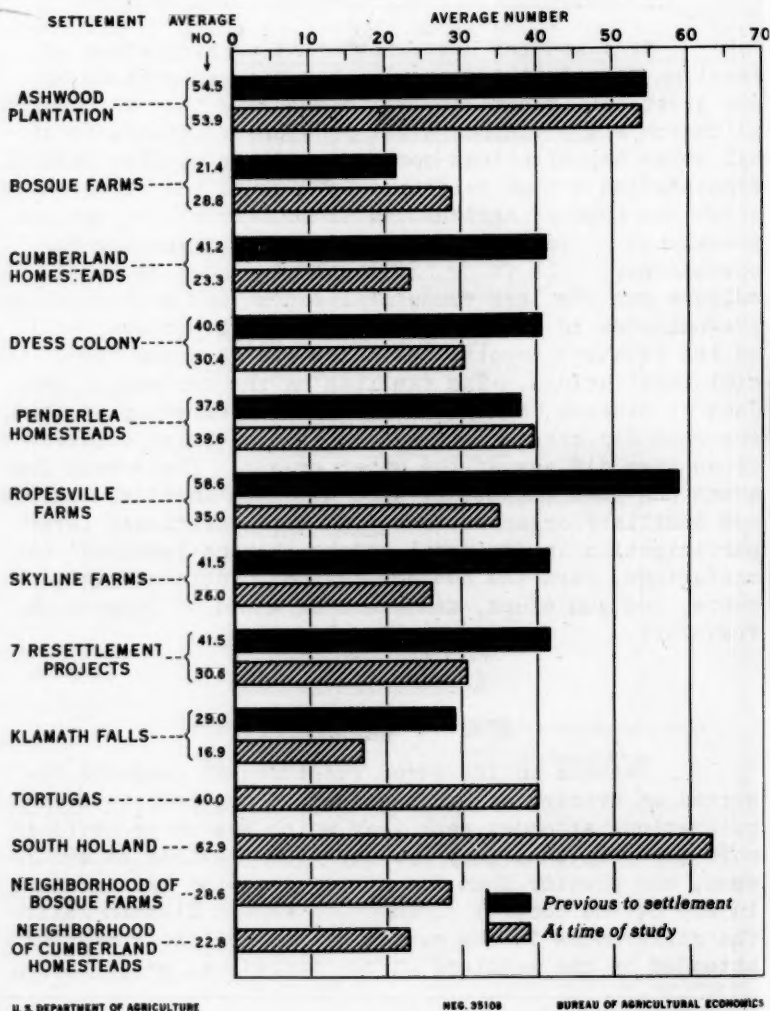
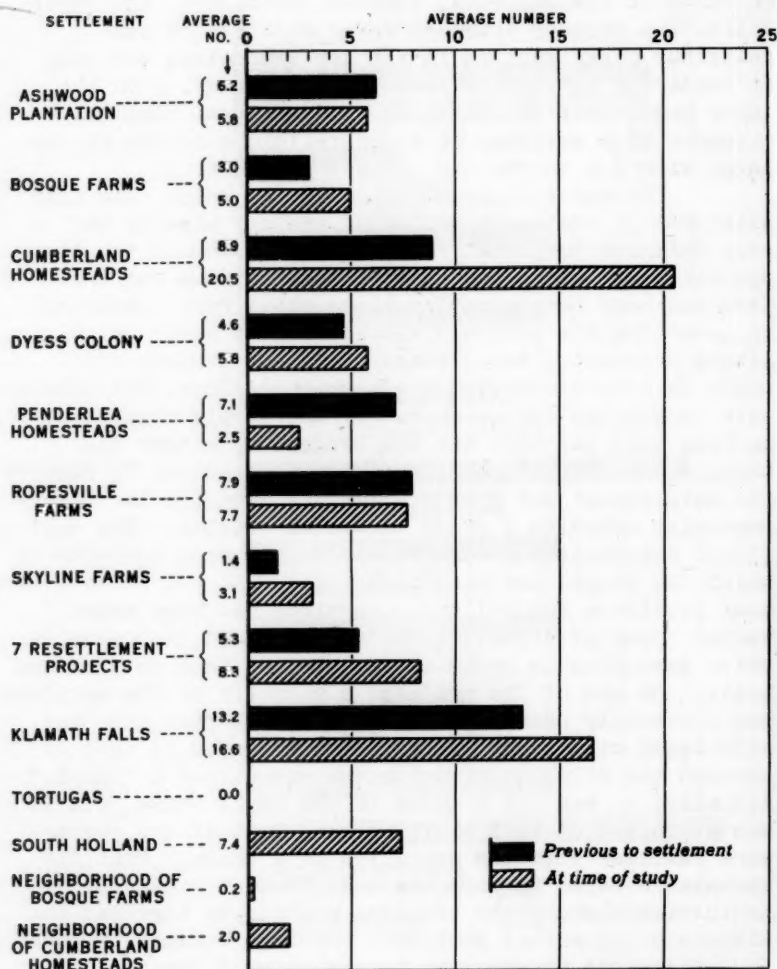


Figure 2. Average number of meetings of religious organizations attended annually by parents, at time of study and previous to settlement, 1 reclamation and 7 resettlement projects and 4 control groups.

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previous to and after settlement, showed much variation. On three of the projects, Ashwood, Penderlea, and Ropesville, the parents attended fewer meetings of non-religious organizations in the new community, but only at Penderlea was the difference significant. On the other hand, families residing on Cumberland Homesteads attended 20.5 meetings of a non-religious nature as compared with 8.9 in the old community. (Fig. 3)

The non-religious organizations which came into existence in the early period of project history had very definite purposes. Some agencies such as the co-operative marketing and medical associations and the farm and Home Demonstration clubs which were essential in promoting the economic success of the newly established community, were sponsored by the project officials in accordance with predetermined plans. But others were originated and sponsored by the people themselves to fill some gap that was not bridged by either the churches or the officially sponsored agencies. To observe the development and growth of social agencies in the new community embodies a study in social origins. The unofficial organizations were based largely upon patterns to which the people had been accustomed. Almost as soon as some provision for religious services had been made, varied types of organizations sprang up in the colonies which purported to bring the people together on a common basis. On one of the projects a majority of the settlers had previously been textile and mine laborers and thus affiliated with labor unions. In deference to this old pattern the colonist organization was called a "union." Actually, it was not a union in the usual sense, but it was organized on that basis because most of the people were familiar with the operation of a union. What the organizers hoped to form was some form of community organization whereby the settlers might come together for discussion of mutual problems. Perhaps because of local prejudices and antagonisms to any form of "union" the organization was not encouraged, but, on the contrary, was definitely opposed by many of the settlers and some of the project officials. Despite its more or less questionable title, the basis of an organization so essential to successful operation of the project was there and perhaps should have been directed and encouraged

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Figure 3. Average number of meetings of non-religious organizations attended annually by parents, at time of study and previous to settlement, 1 reclamation and 7 resettlement projects and 4 control groups.

into a channel that would have done much to minimize the difficulties the families were experiencing.

An organization with the same general purpose, a community organization of the men, appeared on another of the projects. The original intent of the "Brotherhood" was to foster relationships between families in the new community, to aid the new arrivals in getting established, and in case of distress to contribute any possible aid. As the number of settlers increased and were scattered over a wider area, smaller organizations of the same type, but with a more limited scope of influence, were established. Eventually, the group attempted to become the official organization of the colonists in an effort to cement relationships between the families and between the families and the management. On other projects similar organizations existed.

The early days in all of the resettlement communities were fraught with difficulty and many efforts and techniques had to be employed to promote community integration.<sup>12</sup> All of the efforts neither originated with the settlers nor in the officially sponsored organizations. Some rather ingenious devices were employed to combat the growing pains in the new community. In one resettlement project some of the settlers were prone to indulge in intoxicating beverages on the slightest provocation. A colony-wide celebration was being planned and in an attempt to prevent drinking on the occasion inasmuch as outside visitors were expected, a colony official deputized some of his greatest offenders as peace officers. So successful was the venture that the deputies had their tenure of office extended. Another project in the early days secured an unsavory reputation as the place for people in the surrounding area to do their carousing. A bit of encouragement from the officials and a movement among the inhabitants checked rather suddenly such conduct.

Generally the people came to the resettlement community with old prejudices and traditions which they could not readily relinquish. The project itself,

12. Loomis, C. P. and Davidson, D. M., Jr., Measurement of the Dissolution of In-groups in the Integration of a Rural Resettlement Project, Sociometry, Vol. II, No. 2, 1939.

undeveloped and unestablished, was a radical departure from the culture of the old community in which they had lived. The solution to some problems by the colonists was a reversion to the denominational church as against the union church and the organization of brotherhoods and unions patterned along the lines to which they were accustomed. Perhaps unfortunately, but of necessity, the cooperative enterprises to which the families were unaccustomed and which were expected to supplant immediately all old ties received greater encouragement in the early days than the spontaneous agencies of the people.

Recent studies of rural youth have showed a minimum of participation in non-church organizations, but most of these studies indicate that rural young people are anxious for the opportunity to take part in various social endeavors.<sup>13</sup> The groups included in the present study cannot be taken as exceptions because the participation of the children in non-church activities, with the exception of the 4-H clubs before and after settlement, was limited. However, as indicated by the proportion of the children who were attending meetings of such agencies the new communities did contribute to the social life of the children. While only 2 per cent of the children over 15 years of age reported any attendance in the old communities, about 9 per cent of these children were participating in non-religious organizations in the new communities. The proportion of the children on the Indian-Mexican village attending non-religious activities was greater than that in any of the residence groups. The children also tended to establish their own social groups, and clubs and cliques were not absent among the older children even in the early days of the project. Three of the projects, Ashwood, Cumberland Homesteads, and Dyess, had well-supported 4-H Clubs for

13. Joy, Barnard D., et al., *Situations, Problems, Interests of Unmarried Rural Young People 16-25 Years of Age*, Extension Circular Nos. 259, 417, 269, 277, 282, and 293, United States Dept. of Agri., Washington, D.C.; Melvin, Bruce L. and Smith, Elna N., *Rural Youth: Their Situations and Prospects*, Research Monograph IV, Works Progress Administration, Washington, D.C., 1938; and Bell, Howard M., *Youth Tell Their Story*, American Youth Commission, Washington, D.C., 1938.



the children and the club at Dyess was the largest 4-H Club in the nation. Although the scope of influence of these organizations was limited, in all cases the interest of the young people was great.

#### Availability of Social Agencies

Although the study of the social agencies themselves revealed the number of meetings held, the interviewed families were asked to give this information under the assumption that averages weighted by the number of families who knew about the program of these agencies would present a truer picture of availability.<sup>14</sup> From these data it was found that there were no significant differences in the number of meetings available in the new resettlement communities and in the communities of residence previous to settlement. Actually, it is possible that there were more meetings available in the new community but at the time of the study many of the families had not become acquainted with the programs.

#### Leadership in Social Agencies

If the resettlement projects are to accomplish their objectives, leaders from among the settlers must eventually assume control of the social and economic agencies which serve them. As one colony manager stated, "My sole purpose here is to work myself out of a job

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14. In determining availability, the families interviewed considered such factors as distance to the meeting place of the institution, transportation, denomination, and so forth. A Methodist family, when asked whether a church was available, might answer "no" if there were no Methodist churches within a reasonable distance even though a church of another denomination, say Pentecostal Holiness Church, might have existed in the neighborhood. Some, however, answered "yes." Affirmative replies of this type were taken to indicate that the interviewed person considered that he might under certain circumstances attend the church even if it were of a different denomination than the one to which he customarily belonged.

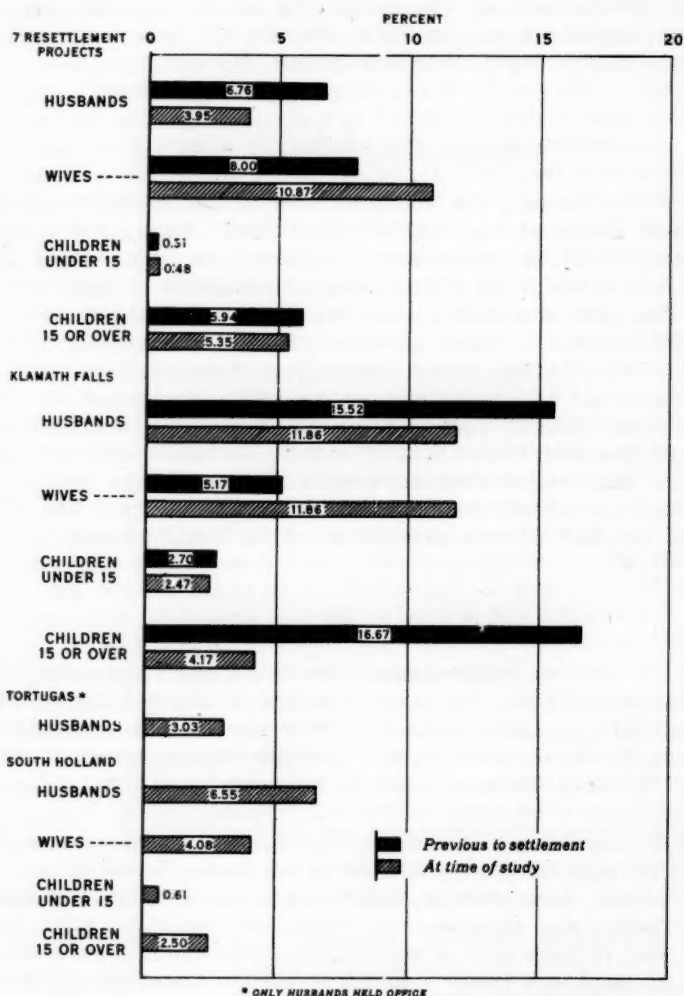


Figure 4. Percentages holding office in formal community organizations, previous to settlement and at time of study, 1 reclamation and 7 resettlement projects and 2 control groups.

and as soon as the people are ready to take over, I leave." Thus, when the Government officials move away from the project, responsible direction must be drawn from the settlers. For this reason, in resettlement on a community basis few problems are more important than the development of, or selection of, leaders.<sup>15</sup> The people must become accustomed to the new patterns which are an essential part of the planned rural community and these new patterns must supersede old experiences. As for example, most of the communities are dependent upon rather elaborate cooperative enterprises which, for most of the settlers, represent an innovation. Leadership must be developed and it is encouraged by project officials. However, sometimes the people the officials pick for leaders do not coincide with the selection of the people themselves. Unfortunately, at the time of the field work the project organizations were too immature to warrant an adequate appraisal of leadership.<sup>16</sup>

The proportions of the populations in the various groups which held offices, served on committees, or were recognized as officers in any of the organizations varied greatly. Among the different groups none was so outstanding in the proportion of the parents holding office as Penderlea Homesteads. It should be mentioned that one of the more important considerations in selecting candidates for resettlement at Penderlea was a demonstrated capacity for leadership, a fact which may explain the relatively large number of leaders. In both the old and new communities a larger proportion of the wives than husbands were classified as leaders. Klamath Falls with its large number of special interest organizations outranked all others in the proportion of persons holding office. In South Holland and Tortugas, where social participation was predominantly in church

15. Holt, John B., *An Analysis of Methods and Criteria Used in Selecting Families for Colonization Projects*, Social Research Report No. I, United States Department of Agriculture, Washington, D.C., September, 1937.
16. On one project the leaders selected by the people in response to a specific question were diagrammed by sociometric techniques and the results showed little comparability to leaders designated by the officials.

organizations, smaller percentages of the residents held office than was true of the settlers prior to arrival on the projects (Fig. 4).

Will a person who is a leader in one community tend to be a leader in the community to which he migrates? In the present study 35 per cent of persons holding office during the last year of residence in the old community also held office on the projects to which they moved. Although no information was available concerning the ordinary annual turnover in officers for these groups, it was obvious that persons who were leaders in one community became leaders in the new communities more frequently than the non-leaders. Although new leaders will make their appearance, more of the persons who took leading parts in their old environment may be elected to office as the project agencies become more established. One of the most interesting processes in the development of the project was the effort on the part of the persons who had been leaders in their old communities of residence to attain leadership status in the agencies of the new communities.

#### SUMMARY AND CONCLUSIONS

(1) Although the attendance of the families on the 7 resettlement projects at church meetings at the time of the study was less than that of the same families previous to resettlement, it was relatively high considering the lack of facilities during early project development.

(2) Attendance at non-church meetings was greater at the time of study on the 7 projects than it had been for the same families previous to resettlement. In part this is accounted for by the cooperative, educational, and other non-religious groupings sponsored by the resettling agencies.

(3) The importance to the settlers of organizations developed according to patterns to which they had been accustomed in the old communities appeared rather significant.

(4) Individuals who were leaders in their communities previous to resettlement were more likely to become leaders on the resettlement projects than those who were not leaders in their old communities.

AN ATTEMPT AT CHANGE IN INTER-PERSONAL  
RELATIONSHIPS<sup>1</sup>

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SYNOPSIS

This paper describes an attempt to alter the inter-personal relationships within the group. Two groups of 14-year-old boys with approximately the same initial intra-group social structure (as determined by Moreno sociograms) were used in an experiment to determine whether this structure could be altered in the direction of increasing the bonds between an isolate and other members of the group. Of the two experimental techniques used, that of having the adult leader work directly on an isolate in an attempt to bring him into group acceptance was unsuccessful; the second and principal technique, that of having the group leader (as shown by the sociograms) assume the responsibility of working the isolate into acceptance, showed by repeated sociograms at the end of seven weeks that: 1. the isolate in the experimental group had improved more than the isolate in the control group; 2. the extent of this change would be exceeded by only 7% of chance changes.

A common method in sociometry is to change the individual from the group in which he is maladjusted to

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1. The author wishes to thank Clinton Sperry for his assistance in obtaining data, John A. Granston for his continued interest in sociometry, and to Dr. R. R. Willoughby for supervision of this problem and assistance in the editing of this paper.

another for which he expresses a preference. We believe that this method is not practical in many group situations. Accordingly we have attempted to bring the individual from his state of isolation into group acceptance. Our interest is the development of a technique of control, a means of harnessing the forces which are present in inter-personal relationships, to the end of relieving the adverse group pressure and tension upon the isolate. We are approaching the problem from the utilitarian point-of-view; we are concerned with what can be done with inter-personal forces.

The problem that first presented itself was the securing of two groups of approximately the same average age and the same program, one to be the experimental group and the other to be the control group. These groups we found in two Junior Hi-Y Clubs in the public school system of Cranston, Rhode Island. The average age of these boys is 14 years. The two groups have like programs, i.e., the boys in each of the clubs meet once a week at a formal meeting; associate with each other throughout the school week; play together on the same club teams--football, basketball, and baseball; go on occasional hikes or cook-outs together; and get to know each other very well. Both of these clubs, Goddard and Wood Lawn, were under the same adult leader who in turn was under the supervisor, the writer of this article.

The next problem was to devise a criterion by which the leaders, average members, and isolates would be revealed. In the sociometric work carried on by Dr. Moreno and his associates the best results were obtained when there was a specific criterion by which the choices were made. With this in mind we presented a questionnaire upon which the individuals in the two clubs indicated three choices of those with whom they would like to work on a committee and also three choices of those with whom they would not like to work.

This presentation was made twice, first during the week of March 19, 1939, and again during the week of May 7, 1939. The committees were made up on the basis of the data received on March 19. The committees for Goddard were (1) Briggs, Shaw, Dodge; (2) Bain, Mullen, Handy. For Wood Lawn they were (1) Savage, Healy, Bucklin, Olivo; (2) Rocco, Page, Martin; (3) Goff, Hayes, Collins.



The athletic, social, and program activities were carried on entirely through the committees, which started to work during the week of March 26, and were still working when the second questionnaire was presented on May 7. For our purpose it did not matter what the boys did--the important thing is that they worked as committees. One week during this period the schools were on vacation, but the Junior Hi-Y clubs met and went on hikes.

We allowed Goddard to act as the control group and used Wood Lawn as the experimental group. In our first test we found for Wood Lawn a strong leader, Savage, an outstanding isolate, Olivo, and another isolate, Hayes. Savage received 9 positive choices. Olivo on the other hand received not a single positive choice but rather 6 negative choices. Hayes received 1 positive choice and 4 negative choices. In terms of "Feeling units"--3 for a 1st choice, 2 for a 2nd choice, and 1 for a 3rd choice, (same for positive and negative) the boys compared as follows: Savage had at this first test a plus 19 units, Olivo minus 14, and Hayes minus 7.

We directed our attention mostly to Savage and Olivo. In these two we had the extremes of the group, since one was the most popular in the estimation of the group, the other was the most unpopular. We were interested in raising Olivo's popularity position in the group. The two assumptions made were first that consciously or unconsciously Savage knew the secret of attracting the other boys to himself, and second that they would follow his lead in so far as attitude toward another boy was concerned. Next we approached Savage through the adult leader. Savage was instructed to see what he could do in getting the other fellows in the club to like Olivo. He was told to look for the good points in Olivo, and to try to be a friend to him. We allowed him to use his own way in this attempt to get Olivo a higher position in the estimation of the group. Olivo was placed on the same committee with Savage, and therefore had a better opportunity for a close association.

We tried a different technique in regard to Hayes. The adult leader was instructed to attempt to work him into group acceptance. We assumed in this case

that an older fellow's attitude toward a particular boy would be the pattern for the boys in the group.

After allowing our technique to continue for seven weeks, we again presented the questionnaires to the boys in both clubs. From the data received we found that Olivo's position in the group had been changed. Whereas in the first test Olivo was rejected by 6 boys and chosen by none, in the second test he was rejected by 2 less and 3 expressed a preference to work on a committee with him. He showed a change of plus 4 in "boy-units" (algebraic sum of number of boys for a given boy and number against). Hayes, the isolate upon whom the adult leader worked, changed 2 boy-units in a negative direction.

The control group, Goddard, changed more than the experimental group, Wood Lawn. But in spite of this the isolate, Powers, (in terms of boy-units) did not change. The leader, Dodge, lost his high standing and fell to the isolate's position in the group in the second test.

Therefore it may be observed in the experimental group that in terms of boy-units the isolate Olivo changed 4 units in a positive direction as a result of the treatment, and Hayes 2 units in a negative direction. Further, in terms of feeling units the corresponding figures are plus 8 and minus 3. From this it appears that the treatment has been successful with Olivo but not with Hayes, but it remains to be determined to what extent this result could have been brought about by chance instead of by the treatment.

One method of evaluation is to compare these changes with the changes affecting the corresponding isolate in the control group. Powers did not change as to boy-units, but in terms of feeling units, the score changed from 0 to minus 3. In terms of feeling units Mullen may be regarded as the initial (control) isolate, with minus 1 on the initial test and 0 on the final one; in boy-units the scores are 0 and 0. As measured by this comparison, then, the treatment applied to Olivo and withheld from Powers and Mullen still appears to be effective, and the alternative treatment applied to Hayes was at least without positive effect. A partial explanation of this failure may be in the adult leader's

statement to the effect that Hayes stuck close to him, resulting in the dislike of the other boys. By asking the adult leader to work with this boy, it is possible that we increased the very reason for his unpopularity.

A second estimate of the chance factor may be obtained by comparing the changes observed in these boys with the population of changes secured from all the boys in the experiment. In the population of 17 changes in boy-units within both groups, Olivo's change of plus 4 was equalled by two boys and exceeded by none; in the corresponding population of 17 changes in feeling units, his change of plus 8 was equalled by one and exceeded by none. Hayes was exceeded, in boy-units, by 13, and in feeling units by 11. Powers, the control isolate in terms of boy-units, was exceeded by 9 of the 17 boy-unit changes and by 11 of the 17 feeling unit changes. Mullen, the control isolate in terms of feeling units, was exceeded by 8 of the 17 boy-unit changes and 5 of the 17 feeling unit changes. We may conclude that this type of comparison also points to the real effectiveness of the technique used with Olivo and to the absence of at least any positive effect of that applied to Hayes.

Perhaps the best standard with which to compare the changes produced by the experiment is an actual empirical-chance distribution. To construct this a number of lettered slips equal to the number of boys in the experimental group was prepared, (only boy-units were tested in this manner) one, which was to represent the boy making the choices, was withdrawn at a time, and the remainder was shaken up in a box; six were then drawn and recorded, the first three being positive choices and the second three negative. These were replaced in the box and reshaken, and six drawings were again made to simulate the second sociometric testing. After choices had been made by each of the "boys," the "boy-unit" changes were computed for each "boy" and these were distributed. This procedure was repeated five times, giving a population of 50 chance "boy-unit" changes. In this distribution Olivo's (real) is exceeded by 3.5 of the chance changes, and Hayes' by 37. This comparison is in agreement with the others, and in addition makes possible a rough quantitative statement of the reliability of the result, that the chances are in the

neighborhood of 13 to 1 (93 to 7) that a real change was produced in Olivo's acceptance by the group as a result of the social treatment applied to him over the seven-week period. The results we have obtained from this experiment with regard to Olivo would indicate that we are proceeding in the right direction in our efforts to work an isolate into group acceptance.

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SPONTANEITY TRAINING IN PUBLIC SPEAKING  
CLASSES: A PRELIMINARY REPORT

J. G. Franz  
Columbia University

Past researches in sociometry have revealed the existence of psychological networks in a community of which an individual lives in fear. It is this dread of negative networks coming from a new situation, an audience, which puts fear into an individual who acts quite naturally among his acquaintances as he meets them individually but who "gets all tied up" when he first steps upon the public platform. Students very often confess that their audiences were mere blanks before them as they spoke for the first few times. Instances of where students fainted before the group have been reported. The task of the instructor is to break down this condition. Public speaking is often defined by such terms as "getting over," "warming up to the subject," "contact with the audience," "being ill at ease," and "stage fright." These terms need to be broken down and transformed from verbal reaction forms into explicit speaking patterns and thus open the way for the application of sociometric and spontaneity techniques. The academic teaching of public speaking ignores the relationship of the personality of the speaker to his audience. It is more interested in what a person says than in how he says it. However, today, audience psychology gives more and more importance to an "act" performance rather than a "content" performance, especially during the initial period of learning how to face a group.

During the last winter we have begun research upon the application of spontaneity and sociometric techniques to the teaching of classes in public speaking. The members of the classes involved were all adults, both male and female, from business and professional life. The classes averaged thirty members each.

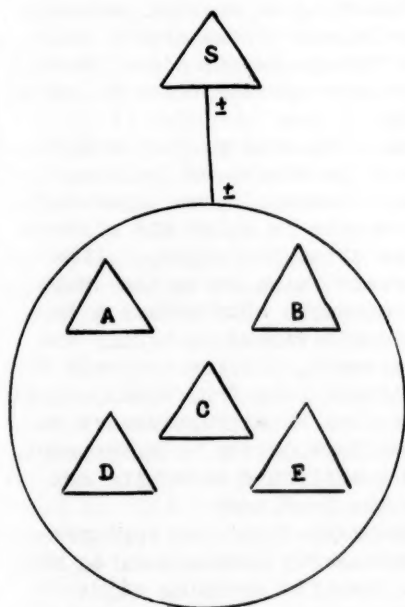
The first attempt at studying the possibility of introducing spontaneity training into public speaking classes was to get some picture of the group structure by means of sociometric tests. Since the classes met for dinner sessions prior to the regular class sessions, we found it quite easy to devise a number of tests by which to determine the sociometric rating of each individual. The tests used were on the basis of such questions as: "Whom do you wish to introduce at this dinner session?" and "Who shall comment upon your talk to-night?"<sup>1</sup> Three choices were permitted. The tests revealed a looseness of structure in the early part of the class sessions. Most of the choices were captured by a few key individuals. Closed networks were quite evident. There was a decided lack of reciprocation. The key individuals became important factors in the next phase of our experiments.

The fear of negative symbols hinders the spontaneity of the beginning student. He does not see that his audience is not really anything else than a number of individuals who have names, whom he knows, and who are not too negative toward him. It is a symbolic fear and not a real one which disturbs him. To overcome the difficulty of facing the audience, the following technique was used: As each speaker appeared before the class several individuals who had either been chosen by the speaker or had chosen him were asked to make a "special" audience. This special audience encouraged the speaker by asking relevant questions about the subject of the speaker and, in some instances, by heckling in a friendly manner. This experiment had an immediate effect upon the speaker. His speaking voice became more natural and conversational; in other words, he was

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1. A test for discovering the inter-personal relationships in a public speaking class which we hope to use in the future is the one which has been used at The New York Training School for Girls at Hudson, New York. First, second, and third choices are determined by asking each individual to what three persons in the group he would divide ten minutes of speaking time. This is an ideal way for getting a quantitative measure of tele toward members of the group. Results of this test can be carried out in actual practice very easily.

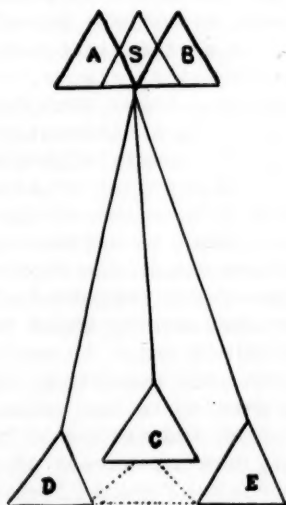


beginning to speak to the individuals in the group and not to an audience. Contact with two or three key persons in the group led naturally to contact with all individuals in the group. Through a graduated process, the whole audience became the auxiliary ego of the speaker. The audience as a symbol of hostility was dissipated. This is a basic and necessary step on the way towards successful speaking. The transition is illustrated by the sociogram showing the speaker's relation



I

Relationship to audience  
as a symbol



II

Relationship to audience  
as individuals through  
auxiliary egos A and B

to the audience as a symbol (I) and the sociogram showing his relation to the audience as individuals through auxiliary egos, A and B, (II).

The second phase of our research consisted in an

attempt to study the problem of spontaneity and warming up. If a speaker does not warm up quickly, especially if he is called upon to speak without preparation, the speech is a failure. The best written speech, delivered in the best manner according to authoritative writing on the art of public speaking, falls flat unless it meets one condition--is the speaker able to convince his audience? The speaker must be able to feel himself into his speech in the same way that a subject on the impromptu stage must be able to feel himself into his role. Often, a public speech is a mere rehashing of another person's words, an attempt at effects beyond the speaker's ability, or a vain attempt at imitating someone else. Such a speech fails, always, because the speaker tries to sell something other than himself.

In an attempt to teach the student to identify himself closely with the words he speaks on the stage, to make him *feel* it as a part of himself, we experimented with a number of impromptu acts in which the students were asked to assume a number of simple roles. (The sociograms of the classes became valuable in the selection of the players.) The impromptu acts became a tool for discovering which individuals warmed up easily and which did not. In one act a woman, playing the role of a landlady demanding five dollars rent from a man, failed to warm up to her role. Her lack of aggressiveness was also an indication of her own personality. In the same act, the man warmed up very quickly and ended the act by borrowing five dollars from the landlady.

Situations like a landlady-tenant or employee-employer relationship are relatively simple and, as yet, are not directly related to specific speaking situations. Our problem now became the transition or graduation toward spontaneity in actual speeches--from a simple spontaneity level to the more difficult level of "giving a talk before an audience." This was attained by asking the subject to create a role for himself suggested by his talk, and then, with the use of auxiliary egos from the class, to enact this role. An example is the case of a woman who wished to give a talk on the subject: "It is bad not to want children." Instead of telling the class about an incident from her own experience illustrating her point, she was asked to recreate

the incident as accurately as possible. This was done successfully with the result that she warmed up to her subject very quickly. Further research will reveal to what extent this spontaneity in impromptu acting carries over to spontaneity in actual speaking situations. At present, spontaneity theater techniques<sup>2</sup> as developed by Moreno appear to be useful in training students in "warming up" to their subjects while speaking before an audience.

Although the sociometric and spontaneity techniques outlined in this preliminary report have not been applied over a sufficiently long period of time to warrant a final evaluation, we feel that the following tentative conclusions can be made:

1. Networks in a group can be used as instruments for helping a student overcome certain psychological speaking disabilities, such as stage fright, being ill at ease, and a generalized fear of the audience.

2. Impromptu theater techniques can be utilized for training in spontaneity in speaking situations. The student can be trained to warm up to his role as speaker by using individuals from the audience as auxiliary egos.

At the present stage of our research the important factor seems to be the need for more experimentation and use of these techniques in actual practice. Tentative conclusions will or will not be justified as soon as more time of actual application to new classes has elapsed. If, after further research, the techniques outlined in this report have become valuable and useful, the way may have been opened for further use of spontaneity in the field of teaching.

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2. For a general discussion of the techniques mentioned in this paper we refer the reader to Inter-personal Therapy and the Psychopathology of Inter-personal Relations, by Dr. J. L. Moreno, in SOCIOMETRY, Vol. 1, No. 1.

A COMPARISON OF BELL ADJUSTMENT SCORES  
FOR AMERICAN AND SCOTTISH GROUPS

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and

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As part of an extensive study of the social problems of juveniles in a Scottish industrial area, the Bell Adjustment Inventory was filled in by various groups of school-leavers, unemployed and employed young workers.<sup>1</sup> The object of this paper is to compare the scores of the Scottish subjects with those published by Bell (1) for American college and high school groups. The analysis is reported in three sections, namely:

- Section I - a comparison of Scottish and American college students
- Section II - a comparison of four American groups with seven Scottish groups
- Section III - frequency distributions of scores on a percentage basis for 332 male and 433 female American subjects and 438 male and 184 female Scottish subjects.

The Bell Adjustment Inventory aims at providing

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1. This investigation was carried out under the direction of Dr. O. A. Oeser of the University of St. Andrews, Scotland. It was financed by special research grants from the Pilgrim Trust and the British Medical Research Council. A general account of the research has been published in the Report of the British Association for the Advancement of Science, 1936, under the general title of "Co-ordinated Social Researches in a Scottish Area" (3), and in the British Journal of Psychology, April, 1937 (2).

four separate measures of personal and social adjustment, and one measure of general adjustment:

- (a) Home Adjustment. Individuals scoring high tend to be unsatisfactorily adjusted to their home surroundings. Low scores indicate satisfactory home adjustment.
- (b) Health Adjustment. High scores indicate that the individual reports unsatisfactory health adjustment. Low scores indicate a good report on health adjustment.
- (c) Social Adjustment. High scores indicate a tendency to submissive and retiring attitude in social contacts. Low scores indicate that the individuals are aggressive in their social contacts.
- (d) Emotional Adjustment. Individuals scoring high indicate a tendency to emotional instability. Low scores indicate emotional stability.
- (e) Total Adjustment Score. This score is the sum of the scores on the four scales, and indicates the general adjustment of the individual.

Each of the four individual scales contains the same number (35) of items. Bell has published a detailed account of the development of the test, and of its standardization on 161 boys and 190 girls in high schools, and 171 men and 243 women in colleges, as well as on a group of delinquents (1). All the students were working in educational institutions in California.

The intelligence of the Scottish students was measured on the Pressey Senior Classification Test (5), which was revised to meet British requirements.

#### SECTION I. A COMPARISON OF SCOTTISH AND AMERICAN COLLEGE STUDENTS

The Scottish "college" group was made up of the following four groups of Scottish students:

- (a) An entire School of Economics and Commerce, 18 males and 9 females, all full-time day students.
- (b) An entire School of Art, 29 males and 29 females, all full-time day students. The students were taking courses in drawing, painting, design, or sculpture.
- (c) The entire Department of Pharmacy in a Technical College, 31 males and 8 females, all full-time day students.
- (d) From the Department of Engineering in a Technical College, 33 electrical and 67 mechanical engineers, including one female in each group. This gives a total of 100 students, all evening class students, working in industry during the daytime.

The total number in the four groups is 224 subjects, 176 males and 48 females. No significant differences were found to exist between the average scores of these four groups on the various adjustment scales. Therefore the groups were pooled.

All the average scores on the five adjustment scales for the four groups of Scottish male subjects fall within the range of "average" on Bell's male college norms, but the average for home adjustment is 5.39 which is on the border of a "good" rating for Bell's group.

With regard to the Scottish female group, all the scores are "average," but the social and total adjustment scores are on the border of an "unsatisfactory" score on the basis of Bell's female college student norms. It should be noted that Bell's norms for female college students differ from the norms for the male college groups.

Table I shows the averages and standard deviations for the male and female groups, as well as the intercorrelations between the adjustment scores. The health score of the Scottish female group (7.40) is inferior to the health score of the male group (6.28). This is the reverse of Bell's finding.



Table I

BELL ADJUSTMENT INVENTORY						
INTERCORRELATIONS, N = 176 MALES						
		Adjustment Scores				
		Home	Health	Social	Emotional	Total
Intelligence		.07	.05	-.00	.06	.03
Age	.16	.02	.15	.04	.04	.04
	Home		.33	.02	.57	.32
	Health			.13	.50	.30
	Social				.40	.32
	Emotional					.43
Av.	20.87 66.85	5.39	6.28	15.13	7.97	34.77
σ	3.75 15.05	5.41	3.94	7.10	5.86	15.11
INTERCORRELATIONS, N = 46 FEMALES						
		Adjustment Scores				
		Home	Health	Social	Emotional	Total
Intelligence		.13	-.03	-.00	.04	.05
Age	.10	.13	.26	-.06	-.16	.03
	Home		.39	-.03	.33	.58
	Health			.03	.28	.54
	Social				.50	.68
	Emotional					.82
Av.	20.86 63.89	7.65	7.40	18.92	13.94	47.90
σ	2.47 15.53	5.37	4.13	7.28	5.71	14.92

### Intercorrelations between the Variables

The intercorrelations for age, intelligence, home, health, social, emotional and total adjustments are shown in Table I. All correlations over .24 for men and .42 for women are significant. It will be seen that:

- (1) Intelligence and age are not significantly correlated with each other or with adjustment scores in either the male or female group.
- (2) The significant adjustment correlations for the male group are: (a) home and health adjustment, (b) home and emotional adjustment, (c) health and emotional adjustment, and

- (d) social and emotional adjustment. The emotional scores correlate significantly with all the remaining adjustment scores for men.
- (3) The significant adjustment correlations for the female group are:
- (a) home and health adjustment and
  - (b) social and emotional adjustment. Neither home and emotional nor health and emotional adjustment correlate significantly for women as they do for men.
- (4) In both groups significant correlations exist between the first four adjustment scores and the total score. The correlations are of course spuriously high, but since the scales each contain the same number of items, the scale which best predicts the total score in both sex groups is the emotional scale, since it correlates most highly with the total score.

The critical ratios for the differences between the correlation coefficients of males and females on the first four scales with the total score are as follows:

(1) home adjustment and total adjustment . . . . .	3.30
(2) health adjustment and total adjustment . . . . .	3.08
(3) social adjustment and total adjustment . . . . .	5.07
(4) emotional adjustment and total adjustment . . . . .	8.67

In the case of all the correlations, the critical ratio taken was the difference between the correlation coefficients divided by the probable error (P.E.) of the difference.

Bell does not give the intercorrelations for different sex groups, nor the correlations of the separate scales with the total. Therefore, no direct comparison with Bell's data is possible. He does state on the basis of a comparison of the "average" for emotional adjustment that "college women gave more maladjusted responses than college men." This difference is statistically significant.

Bell has published intercorrelations for the first four scales. The correlations of the Scottish male group have been compared with the correlations he reports. No significant difference exists between this group and his group which is a mixed sex group. The greatest difference between the intercorrelations is that between the correlations of home and emotional adjustment for which the critical ratio is 3.80. The magnitude of the intercorrelations is of the same order. Therefore the relationships between the various scales for Scottish and American students may be considered closely similar.

Another comparison between the Scottish and American groups is given by finding the significance of the difference between the means. Table II gives the critical ratios (difference between the means divided by the sigma of the difference).

Table II

CRITICAL RATIOS OF THE DIFFERENCE BETWEEN THE MEANS OF  
SCOTTISH AND AMERICAN COLLEGE STUDENTS

Subjects	N	Adjustment Scores				
		Home	Health	Social	Emotional	Total
Males	171 Americans 176 Scots	2.44	4.46	5.80	1.04	1.34
Females	243 Americans 48 Scots	1.70	-0.18	-5.36	-4.25	-4.93

These figures indicate that the self-rating by Scottish college students gives them a better "health" score than American college students, while their "social" adjustment is poorer. The Scottish female students report a less satisfactory "social" and "emotional" adjustment than American female college students. The Scottish female college group, however, consisted mainly of artists. The investigation of other Scottish female groups has shown that these artists were significantly more maladjusted than female Scottish school leavers and female clerical workers.

Since all the scores lie inside Bell's "average"

range, the results show differences in adjustments inside a normal average and not an unsatisfactory adjustment. The adjustment scales, therefore, would seem to be valid for Scottish as well as for American groups.

## SECTION II. A COMPARISON OF FOUR AMERICAN WITH SEVEN SCOTTISH GROUPS

The data published by Bell give norms for male and female high school and college subjects. The Scottish groups consisted of male and female school-leavers, male and female clerical workers, male and female juvenile unemployed workers and a group of engineering workers. These groups will be discussed in the same order for each of the five adjustment scales. These groups are not so well matched as the college groups previously discussed, but show the characteristic age differences which exist between young workers in the American and Scottish industrial systems. The younger Scottish school-leavers have to face the same problem of industrial adjustment as the older American high school graduates who enter industry without going to college.

- Group I consists of American high school males reported by Bell. The number of subjects is 161 and the average age approximately 16 years.
- Group II consists of American high school females reported by Bell. The number of subjects is 190 and the average age approximately 16 years.
- Group III consists of American college males reported by Bell. The number of subjects is 171 and the average age approximately 20 years.
- Group IV consists of American college females reported by Bell. The number of subjects is 243 and the average age approximately 20 years.
- Group V consists of all the male school-leavers in July, 1937, at one of the four central schools in the area. The number of subjects is 76, and the average age 14 years and 5 months (4).
- Group VI consists of all the female school-leavers in July, 1937, at the same central school. The

number of subjects is 87 and the average age, 14 years and 5 months (4).

Group VII consists of male clerical workers in various industrial firms in the printing, electrical and textile industries. Out of the 54 subjects in this group, 26 were tested in the Technical College evening course in textiles, but their occupation was clerical. The average age is 20 years and 2 months.

Group VIII consists of female clerks from different firms in textiles, printing and electrical industries. The number of subjects is 17, and the average age, 17 years and 2 months.

Group IX consists of a group of 132 apprentice engineers or qualified engineers. This group is made up of the following subgroups: 1) 16 Technical College full-time day students, 2) 62 Technical College evening course mechanical engineering students, 3) 33 Technical College evening course electrical engineering students, and 4) 21 Technical College evening course textile students who were working as mill mechanics. All these subjects except those in the first sub-group were working at their particular type of engineering during the day. These sub-groups were pooled because of the close similarity of their averages on the various tests. The average age for this group is 20 years and 8 months.

Group X consists of all the male juveniles who, because of unemployment exceeding three months after leaving school, were in attendance at the area Junior Instruction Centre. Attendance at this centre is compulsory for a three-hour morning or afternoon period for five days of the week. Many subjects have had periods of employment. Attendance is not compulsory after the age of 18. The number of subjects is 61 and the average age 17 years.

Group XI consists of all the female juveniles who, under the same conditions as the male juveniles, were in attendance at the area Junior Instruction Centre. The number of subjects is 52, and the average age 16 years and 7 months.

At the time that the two groups of young unemployed workers were tested there was a shortage of juvenile workers. The unemployed subjects tested are, therefore, a selected group who have had difficulty in obtaining employment.

The next five tables give the average scores, standard deviations and critical ratios showing the degree of significance for differences between the group averages. The critical ratio has been found by dividing the difference between the average by the standard error of the difference. Therefore 3.0 may be taken as indicating a significant difference. Each adjustment scale is discussed separately in three sections, namely: (a) differences between the American groups, (b) differences between the Scottish groups and (c) differences between the American and Scottish groups.

Table III  
CRITICAL RATIOS FOR HOME ADJUSTMENT

	American				Scottish						
	High School		College		School Leavers		Clerks		Engi-neers	Unemployed	
Group & Sex	I M	II F	III M	IV F	V M	VI F	VII M	VIII F	IX M	X M	XI F
Mean	6.86	9.10	6.78	6.2	4.6	3.6	6.3	5.6	5.3	7.8	8.6
Sigma	4.98	6.44	5.06	5.6	4.3	3.7	5.4	5.2	5.1	4.6	6.1
		3.7	-0.1	-1.2	-3.6	-5.9	-6.7	-1.0	-2.6	1.3	1.9
			-3.9	-5.0	-6.7	-9.0	-3.2	-2.6	-5.9	-1.7	-0.5
				-1.1	-3.5	-5.7	-0.6	-0.9	-2.5	1.4	2.0
					-2.6	-4.8	0.1	-0.5	-1.6	2.3	2.6
						-1.6	1.9	0.7	1.1	4.2	4.1
							3.2	1.5	2.8	5.9	5.3
								-0.5	-1.2	1.6	2.1
									-0.2	1.6	2.0
										3.4	3.4
											0.8

Home Adjustment. Table III

(a) Significant Differences between the American Groups

The high school and college males show better home adjustment than high school females. The college



females are also better adjusted than the high school females.

(b) Significant Differences between Scottish Groups

The male school-leavers show better home adjustment than the male and female unemployed. The female school-leavers show better home adjustment than male clerks, male and female unemployed. The engineers show better home adjustment than the unemployed groups.

(c) Significant Differences between the American and the Scottish Groups

The female school-leavers show better adjustment than all the American groups while the male school-leavers are superior to all American groups except female college students. The male clerks show better home adjustment than the male and female high school subjects, while the engineers are better adjusted than the female high school students.

The general tendency shown is that the Scottish groups show better home adjustment than the American. The unemployed Scottish subjects were not so well adjusted as the other Scottish groups, but were not significantly inferior to any of the American groups. The American group tends to show increasingly better adjustment with age and education, while the Scottish group, with the exception of the unemployed, show the opposite tendency.

Health Adjustment. Table IV

(a) Significant Differences between American Groups

No significant differences are shown, but the tendency is for the male groups to be better adjusted than the same type of female group.

(b) Significant Differences between Scottish Groups

The female unemployed report inferior health adjustment to all other groups except the engineers (2.9) where the difference is nearly significant. The male school-leavers show superior health adjustment to male clerks, engineers and the male unemployed as well.

Table IV

## CRITICAL RATIOS FOR HEALTH ADJUSTMENT

	American				Scottish						
	High School		College		School Leavers		Clerks		Engi- neers	Unemployed	
Group & Sex	I M	II F	III M	IV F	V M	VI F	VII M	VIII F	IX M	X M	XI F
Mean	7.22	7.98	8.29	7.28	3.9	4.7	5.7	4.7	6.1	5.8	8.5
Sigma	4.16	4.84	4.28	4.62	2.9	4.2	3.3	3.2	4.0	3.7	5.5
		1.6	2.3	0.1	-7.1	-4.5	-2.7	-3.0	-2.3	-2.5	1.5
			0.6	-1.5	-8.5	-5.8	-4.0	-3.9	-3.8	-3.8	0.6
				-2.2	-9.3	-6.4	-4.6	-4.3	-4.6	-4.4	0.3
					-7.5	-4.1	-2.9	-3.1	-2.6	-2.7	1.5
						1.4	3.2	1.0	4.6	3.3	5.5
							1.6	0.0	2.5	1.7	4.3
								-1.1	0.7	0.2	3.2
									1.7	1.2	3.5
										-0.5	2.9
											3.0

## (c) Significant Differences between the American and the Scottish Groups

The male and female school-leavers and the female clerks report better health adjustment than all the American groups, while the American high school female and college males are inferior to the remaining Scottish groups except the female unemployed.

There is a clearly marked tendency for the Scottish groups to report a better health adjustment than the American groups. This does not mean that the Scots actually have better health than the American students, but that they tend to attach less importance to health questions given in the questionnaire.

## Social Adjustment. Table V

## (a) Significant Differences between American Groups

The college males are better adjusted socially than high school males and females, while college females are better adjusted than high school females.

Table V

## CRITICAL RATIOS FOR SOCIAL ADJUSTMENT

	American				Scottish						
	High School		College		School Leavers		Clerks		Engi-neers	Unemployed	
Group & Sex	I M	II F	III M	IV F	V M	VI F	VII M	VIII F	IX M	X M	XI F
Mean	14.14	15.64	10.82	12.68	15.4	17.7	17.0	14.5	15.5	17.3	18.1
Sigma	6.46	7.40	6.64	7.82	5.5	6.7	7.3	8.0	7.6	6.6	5.9
		2.0	-4.6	-2.0	1.6	4.0	2.6	0.2	1.6	3.2	4.1
			-6.5	-4.0	-0.8	2.3	1.2	-0.6	-0.2	1.7	2.5
				2.6	5.6	7.7	5.5	1.8	5.6	6.6	7.6
					3.4	5.7	3.9	0.9	3.4	4.7	5.7
						2.3	1.4	-0.4	0.1	1.8	2.6
							-0.6	-1.6	-2.2	-0.4	0.4
								-1.2	-1.3	0.2	0.9
									0.5	1.3	1.7
										1.7	2.5
											0.7

## (b) Significant Differences between Scottish Groups

There are no significant differences between these groups.

## (c) Significant Differences between American and Scottish Groups

The American college males and females show better social adjustment than all the Scottish groups except the female clerks. The American high school males show better social adjustment than female school-leavers, and both the unemployed groups.

The general tendency is for American groups to show better social adjustment than the Scottish groups.

## Emotional Adjustment. Table VI

## (a) Significant Differences between American Groups

The female high school subjects show inferior emotional adjustment to all the other American groups. The high school males are better adjusted emotionally than the college females.

Table VI  
CRITICAL RATIOS FOR EMOTIONAL ADJUSTMENT

	American				Scottish						
	High School		College		School Leavers		Clerks		Engi- neers	Unemployed	
Group & Sex	I M	II F	III M	IV F	V M	VI F	VII M	VIII F	IX M	X M	XI F
Mean	8.20	13.48	8.60	10.04	6.7	10.9	10.0	11.4	7.5	8.6	14.5
Sigma	5.18	6.48	5.46	6.44	5.8	6.4	6.9	4.5	6.0	5.2	5.7
		8.4	0.7	3.2	-1.9	3.4	1.7	2.7	-1.1	0.5	7.1
			-7.7	-5.5	-8.4	-3.1	-3.3	-1.8	-8.5	-6.0	1.1
				2.4	-2.4	2.8	1.4	2.4	-1.6	0.0	6.6
					-4.3	1.1	-0.0	1.2	-3.9	-1.9	5.0
						4.4	2.9	3.7	1.0	2.0	7.6
							-0.8	0.4	-4.0	-2.4	3.5
								1.0	-2.3	-1.2	3.7
									-3.2	-2.2	2.3
										1.3	7.5
											5.7

(b) Significant Differences between Scottish Groups

The female unemployed show inferior emotional adjustment to all the Scottish groups except female clerks. The male school-leavers and the engineers are better adjusted emotionally than the female school-leavers and the female clerks.

(c) Significant Differences between the American and the Scottish Groups

The Scottish female unemployed show inferior emotional adjustment to all the American groups except the female high school students, while the Scottish male unemployed show better adjustment to the American high school females. The Scottish male school-leavers and the engineers show better emotional adjustment than both American female groups. The Scottish male clerks show better show better emotional adjustment than American high school females. Scottish female school-leavers show better emotional adjustment than American high school females, and inferior adjustment to American high school males.

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The general tendency in both the American and Scottish groups is for males to show a better emotional adjustment than females. Only the Scottish female unemployed show inferior emotional adjustment to the American college females. The sex difference in emotional adjustment seems to predominate over all other differences between the groups.

Table VII

## CRITICAL RATIOS FOR TOTAL ADJUSTMENT

Group & Sex	American				Scottish							
	High School		College		School Leavers		Clerks		Engi- neers	Unemployed		
	I M	II F	III M	IV F	V M	VI F	VII M	VIII F	IX M	X M	XI F	
Mean	34.84	44.63	32.68	34.76	30.6	36.9	39.0	36.2	34.4	39.5	49.8	
Sigma	14.28	17.72	13.84	18.12	15.4	15.2	16.6	15.1	16.7	14.3	15.0	
		5.7	-1.4	-0.1	-2.0	1.0	1.6	0.4	-0.2	2.2	6.3	
			7.2	5.7	6.4	3.7	2.2	-2.2	-5.3	-2.3	2.1	
				1.3	-1.0	2.2	2.5	0.9	1.0	3.2	7.3	
					-2.0	1.1	1.7	0.4	-0.2	2.2	6.3	
						2.6	2.9	1.4	1.7	3.5	7.0	
							0.8	-0.2	-1.1	1.1	4.9	
								-0.7	-1.7	0.2	3.5	
									-0.5	0.8	3.2	
										2.2	6.1	
											3.7	

Total Adjustment. Table VII

## (a) Significant Differences between American Groups

The high school females show inferior "total" adjustment to all other groups.

## (b) Significant Differences between Scottish Groups

The female unemployed show inferior "total" adjustment to all groups. The male school-leavers show better "total" adjustment than the male clerks and the male unemployed.

(c) Significant Differences between the American and the Scottish Groups

The American high school females show poorer "total" adjustment than Scottish male and female school-leavers and engineers. The Scottish female unemployed show inferior adjustment to all the American groups except high school females. The Scottish male unemployed also show inferior "total" adjustment to American college males.

The general tendency of these results is that while the younger American groups show poorer adjustment than the older groups the Scottish groups show the opposite tendency.

SECTION III. FREQUENCY DISTRIBUTIONS OF SCORES ON A PERCENTAGE BASIS FOR AMERICAN AND SCOTTISH SUBJECTS

The distribution of scores on the adjustment scales for both the American and the Scottish groups are skewed, and the degree of skewness for the different scales as well as for the two groups differs. Bell's groups have been pooled to give 332 male and 433 female American subjects. The Scottish groups already mentioned together with some groups not analyzed here, have been pooled to give 438 male and 184 female subjects. Table VIII for males and Table IX for females show the cumulative percentages at each step interval for the American and Scottish groups.

Table X shows the range of scores for high school and college students, to which Bell gives the description "average." Bell based his five descriptive classifications partly on the probable errors of the distributions and partly on counselling experience

The figures in Tables VIII and IX show very clearly how much more skewed towards "good" the home and health adjustments of the Scottish subjects are than those of the American subjects. The skewness of the Scottish group extends beyond the allowance made for it in the Bell "average" range. In the case of the social adjustment the position is reversed. The emotional adjustments are the most similar.



Table VIII

CUMULATIVE PERCENTAGE FREQUENCIES OF MALE SUBJECTS  
AMERICAN AND SCOTTISH GROUPS

Score	Home		Health		Social		Emotional		Total		
	Amer.	Scots	Amer.	Scots	Amer.	Scots	Amer.	Scots	Score	Amer.	Scots
32-33						100.0					
30-31						99.1					
28-29					100.0	98.8		100.0			
26-27		100.0	100.0		99.0	98.8		99.8			
24-25		99.5	99.7		96.0	90.1	100.0	98.9	96-103		
22-23	100.0	99.0	99.7		94.2	83.7	99.1	97.2	88-95		100.0
20-21	99.7	98.8	99.7		89.4	76.9	98.5	95.7	80-87		99.6
18-19	98.5	97.7	99.4		84.3	71.4	97.0	93.9	72-79	100.0	99.1
16-17	95.8	95.6	98.5	100.0	77.7	60.9	94.6	90.5	64-71	99.6	97.5
14-15	93.7	93.3	96.4	98.1	70.5	50.4	91.3	85.0	56-63	98.7	95.5
12-13	89.5	91.2	92.2	95.4	60.8	39.9	84.7	79.3	48-55	92.7	87.5
10-11	82.0	84.4	83.2	91.1	50.9	30.8	76.0	73.1	40-47	82.2	76.1
8-9	77.8	77.6	72.7	85.6	42.8	22.8	64.9	65.8	32-39	67.2	64.1
6-7	67.6	68.9	55.8	71.0	31.6	13.0	51.0	53.5	24-31	45.8	44.0
4-5	52.8	60.2	38.6	52.5	19.2	5.7	38.6	40.0	16-23	29.2	24.9
2-3	36.8	44.0	19.6	32.6	9.3	1.8	25.0	25.4	8-15	10.5	10.5
0-1	16.7	22.8	6.3	8.9	2.4	0.2	9.9	9.6	0-7	2.4	0.9

Table IX

CUMULATIVE PERCENTAGE FREQUENCIES OF FEMALE SUBJECTS  
AMERICAN AND SCOTTISH GROUPS

Score	Home		Health		Social		Emotional		Total		
	Amer.	Scots	Amer.	Scots	Amer.	Scots	Amer.	Scots	Score	Amer.	Scots
34-35						100.0					
32-33						99.7	100.0				
30-31						99.2	99.5				
28-29	100.0	100.0				97.8	97.9	100.0			
26-27	99.5	99.4				94.8	91.9	99.2	100.0		
24-25	98.8	99.4				92.0	86.5	98.0	96.7	96-103	100.0
22-23	97.9	98.3	100.0	100.0		88.1	77.8	95.5	95.6	88-95	100.0
20-21	97.2	98.3	99.8	98.9		81.2	70.7	92.5	92.9	80-87	99.4
18-19	95.4	96.7	98.6	98.9		74.7	53.3	86.3	83.1	72-79	97.6
16-17	92.4	95.1	96.3	95.1		68.7	43.0	81.5	76.0	64-71	94.2
14-15	88.0	92.9	94.0	92.9		61.1	34.8	73.9	68.9	56-63	88.9
12-13	83.6	91.3	90.5	91.3		54.9	28.1	66.0	59.7	48-55	79.7
10-11	79.4	86.4	82.9	86.9		48.0	20.7	56.3	43.9	40-47	69.1
8-9	72.7	77.7	71.6	80.9		34.8	14.7	44.1	34.7	32-39	58.0
6-7	64.2	69.0	59.1	70.6		26.3	-6.0	34.2	23.3	24-31	39.0
4-5	50.8	57.0	44.8	57.6		16.8	4.4	24.7	15.7	16-23	23.3
2-3	37.4	45.6	26.1	34.8		8.3	2.2	14.3	7.0	8-15	10.1
0-1	19.2	21.7	9.2	14.7		3.2	0.0	5.3	1.6	0-7	1.6

Table X  
THE "AVERAGE" RANGE FOR AMERICAN STUDENTS

Group Sex	Home		Health		Social		Emotional		Total	
	M	F	M	F	M	F	M	F	M	F
High School	5-9	6-13	5-9	5-11	10-20	11-21	6-11	9-18	25-44	32-57
College	5-9	5-9	5-11	5-9	8-19	9-19	6-13	8-15	23-41	25-47

### CONCLUSION

(1) No difficulty was experienced in getting the cooperation of Scottish students to fill in the Adjustment Inventory. In many cases the entire educational or vocational group was tested without any protest. The average score for a group of female art students is rated as "unsatisfactory" on the social and total scale. Therefore this Scottish group reports on the average a tendency to more maladjustment than do American students. The Scottish male college students also report a social adjustment which is inferior to that of American college students. These results would seem to indicate that the questions were not offensive to Scottish sensibilities.

This finding is contrary to the general opinion of British psychologists. For example, to quote Dr. Oeser: "It now appears that in the U.S.A. people have got used to having questionnaires sent by post or brought to the door by sociologists. They have become 'questionnaire-conscious.' In Great Britain, particularly in Scotland, this approach is not so well received. Moreover, there is no guarantee that the questions will not be answered in a spirit of levity, or even simply misunderstood" (2).

(2) The inventory was given unaltered in its American form. All the groups were told that the investigators would be pleased to explain any difficulties due to the differences between the "English and American languages." No college students reported any difficulty, but a few school-leavers and several of the unemployed

groups asked the meaning of some of the American terms, such as "make whoopee," and "Do you frequently have spells of the 'blues'?" The names of certain minor ailments such as torsillitis, laryngitis and nausea also gave some difficulty to the members of the unemployed groups. In all these cases the meaning of the terms was explained, and the subject's response obtained.

(3) The application of the inventory to the seven Scottish groups shows that significant differences between these groups do exist. In general the unemployed groups, and especially the female unemployed, gave scores which tend to be significantly inferior to all the other groups on the home, health and emotional scales. There are no significant differences on the social scale. The groups tested lived in an area which has suffered severely from unemployment for many years. This acceptance of unemployment as the only future for a large section of the industrial population may be the reason why the unemployed groups show no greater social maladjustment than the other groups.

Another difference is found on the emotional scale where the male groups tend to show better adjustment than the female groups. There is also a tendency for home, health, and emotional adjustment to be better with the younger groups.

(4) The differences between the American and Scottish groups seem to be controlled by the tendency of the Scottish groups to show better home and health adjustment, and poorer social adjustment than the American groups. On the emotional scale, the sex difference persists between American males and Scottish females as well as in their own American and Scottish groups. The American group tends to show an increase in adjustment with age which is contrary to the Scottish group.

(5) The American and Scottish college male groups are the most comparable in size, age, academic level and social status. The Scottish group shows no significant correlation between age or intelligence and the five adjustment scores--a finding similar to that reported by Bell for the American group. The intercorrelations between the adjustment scales are similar for the two groups, but American and Scottish groups show a critical ratio  $\frac{(\text{Difference})}{(\text{P.E. diff.})}$  for the correlation between home and

emotional adjustment of 3.8 which approaches significance. Although all the average scores for the Scottish group fall within Bell's average range, the health adjustment of the Scottish college males is significantly better, and the social adjustment significantly worse than that of the American college males.

(6) The results indicate that the Bell Adjustment Inventory may be used with Scottish students and vocational groups. The Scottish scores however are more skewed in the direction of "good" adjustment for both the home and health scales. The Scottish groups also tend to be significantly more maladjusted on the social scale than the American groups. The sex difference which shows better emotional adjustment for males is the same in both countries. It should be noted that the unemployed groups show significant differences from the other Scottish groups which do not exist between them and the American groups.

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## REVIEW

CHAPIN, STUART F.: Contemporary American Institutions--  
A Sociological Analysis, Harper & Brothers, New York,  
1935, 417 pp.

The purpose of this book, in the words of the author, is "to illustrate a point of view toward social institutions" rather than to "summarize the entire literature relevant to any of the institutions treated." The value of this point of view is largely methodological. The author attempts to reformulate concepts in such a manner as to point the way and demonstrate the possibility of quantitative studies of social institutions.

The first thirteen chapters of the book deal with the local government, local politics, small business enterprise, the family, the school, the church, and the welfare agencies. Then follow two chapters on the "Social Institutions of the New Deal." The final part, "The Scientific Approach to the Study of Social Institutions," contains the theory of social institutions and presents three attempts at measurement, measurement of social status, of institutional patterns of churches, and of personal intimacy.

The theory of social institutions which forms the theoretical framework of the book contains several concepts, such as a general view of institutions as psychological phenomena, i.e., patterns of attitudes, or other responses conditioned to specific culture traits; the distinction between "latent" and "manifest" culture patterns; the formulation of four Type parts of the "nucleated" institution, i.e., "first, common reciprocating attitudes of individuals and their conventionalized behavior patterns; second, cultural objects of symbolic value; third, cultural objects possessing utilitarian value; fourth, oral or written language symbols which preserve the descriptions and specifications of the patterns of inter-relationships among attitudes, symbolic

culture traits, and utilitarian culture traits (the Code)" (p. 359).

Some of the concepts as, for example, the identification of four parts of an institution, are valuable. The distinction between "manifest" and "latent" culture patterns, on the other hand, is not sufficiently clear. Does it imply a contrast between verbalized and un verbalized social codes, or a distinction between a code with social sanctions behind it and a scientific generalization? Or is the "latent" pattern simply a relation not yet understood or verified? If the latter is the case then the distinction would not seem to deserve quite so much importance as a principle of classification.

The use of graphic symbols which is a distinctive feature of the book is ingenious and useful. The present reviewer does not, however, accept all of the author's claims for it. It is not, strictly speaking, the use of graphic symbols which "breaks down the concept of the interaction process into its component parts" (pp. 329-330). Neither does it "identify the part-whole relationship by indicating how these separate segments of the behavior of different individuals are organized." These operations were performed by a prior conceptual analysis. It is only after the elements were isolated that the author sought to depict them in graphic symbols. Furthermore, there is nothing in the geometric properties of these graphs to enable us to derive from them new social facts, facts which were not, as it were, already put into them by prior analysis and study. All this is not to deny that the graphs may be of value in "helping to visualize a pattern of intangible relations," which in itself justifies their use.

The application of the author's mode of analysis to specific institutions was not carried through with equal consistency in all cases. But, perhaps, this would be too much to expect. Even if the author has succeeded in studying only a few of the facets of institutional life, he has made a contribution in the direction of objectifying social phenomena and making them more susceptible to precise study.

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## REPORTS

Mr. A. D. Johnson, A.B. in Psychology at Brown University and at present Assistant Director of Camp Fuller at Wakefield, R.I. has published a pamphlet on "Sociometric Testing with Summer Camps" for distribution among camp directors.

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The newly formed Association for the Advancement of Psychotherapy held a conference on the technique of the psychodrama at Beacon Hill, Beacon, New York, July 22, 1939.

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